Preserve

G.R.S. IX—5]

Previous references.
Lts 123-1-7 & 1-11.

1922.
(Lto)

File No. 129-22

Serial Nos. 2, 3 & 4

Later references.

GENERAL AND REVENUE SECRETARIAT.

Part B for April 23

SUBJECT

Construction of the Railway Road from Nanjangud to Chamarajanagar.

4.2. To, The president, District Bd. Mysore, the financial Secy to Govt, the Comptroller & Secretary to Govt for Railways
No. L 6971-4/d 9.4.23
Authorises the Mysore Distt Bd to raise a debenture Loan for the Completion of the work of Nanjangud-Chamarajanagar Railway.

4. To, The Secretary to Government for Railways
No. L 7261/d 30.4.23.
Returns the file of papers

Printed on the Multigraph.

HS.
4.5.23.

Railway Secretariat. File No. WD 832—GPB—5,000—24-10-21 of 192

Serial No.

960
30.1.22

P.U.D.

Subject:- Nanjangud-Chamarajanagar Railway

With regard to the Memorial dated 12th December 1921 from certain inhabitants of Nanjan to His Highness the Maharaja, [illegible] whole question of the financing of District Board Railways and the imposition of a cess for the -- purpose requires reconsideration. I shall confi my remarks to the present case as being a typical example.

In the first place, I think that it is generally agreed that a short section of a throug main line should be built and financed by the parent line, that is, in this case by Government. A main line has to be built to a heavier standard than a District Board can usually afford, it is constantly requiring additional capital expenditu and it is difficult to say what share of the -- rolling stock should be paid for by the District Board. Also the keeping of separate accounts complicates matters and causes additional expense On the other hand, a feeder line, built on the - surface as much as possible to keep down cost of earthwork and to a standard fit to carry loaded wagons at a slow speed, and with the minimum of st

Serial No.

-:(2):-

quarters, etc., in other words a light railway of th same gauge as the parent line, is suitable for -- local enterprise. Its interchanged traffic, being additional traffic, increases the receipts of the main line at comparatively little extra cost and for that reason the main, or parent, line can afford to work the branch at a less ratio of working expenses to receipts than obtains on the parent line. Also as the traffic on the branch is -- usually seasonal it will not pay to equip it with rolling stock sufficient for its maximum requirements, and it is usual for the parent line to furnish the engines and stock for a payment of 5 per cent of the annual gross earnings of the branch. By the time the branch is constructed there will be enough stock to allow for this.

The construction of the Nanjangud-Chamraja-nagar Railway is now in abeyance and whether the District Board should be allowed to finance it or no should, in my opinion, await the decision as to whether it is to be part of a through main line or not. If the main line is to run to Erode it is not a suitable undertaking for a District Board to finance, but if the main line is to run via Lanantoddy to Bhoranur it is, in my opinion, eminently suitable.

Serial No.

-:(3):-

The estimate for the Nanjangud-Chamarajanagar is for a main line laid with 50 lb. rails and including rolling stock amounts to Rs.79,046 a mile If the line is built as a light branch using second hand 41¼ lb. rails recovered from the Nanjangud-Bangalore Section or from the Harihar-Bangalore main line and if only the minimum buildings are constructed at first, as many of the staff as possible being accommodated in the neighbouring towns or villages, and if the cost of rolling stock is omitted, the estimate can be reduced as follows.-

Saving in permanent way per mile.		Rs.7,659.
"	Buildings do.	" 1,500
"	Rolling Stock do.	"12,000
		Rs.20,959

Rs.79,046— 20,959 == Rs.58,087.

or to be on the safe side, say Rs.60,000 a mile. Taking the length at 20 miles, the total Capital cost will be

20 x 60,000 = Rs.12,00,000.

The annual interest on this at 7% amounts to -- Rs.72,000. | 84,000

Should be Rs 84,000. This mistake is regretted. 17/2/22

The total amount of cess collected during the last 4 years is.-

1917-18.	Rs.41,028.
1918-19.	" 50,240
1919-20.	" 60,963.
1920-21. ...	" 53,970.
Total...	Rs.2,06,227.

Serial No.

-:(4):-

Giving an average of Rs.51,551 a year and the amount expected to be collected during 1921-22 (according to the Local Board's Branch of the G.I.P. S.) is Rs.55,000. Rs.52,000 may be taken as future average. Assuming that Rs.3 lakhs have been collected before the work is started and that this is invested at 7 per cent per annum the Board will have an annual income from the cess of 7% of 3,00,000 = Rs.21,000 plus 52,000 = Rs.73,000 which is Rs.1000 a year more than the interest on total capital cost calculated at the same percentage.

In addition to this income, a good return may be expected from the railway itself if the parent line works it at 50% of the gross receipts--a fair charge in my opinion if no rebate is given on interchanged traffic--and if rolling stock is provided at 5% of gross receipts.

Judging by the traffic on the Nanjangud-Mysore section, it is not unreasonable to expect receipts of Rs.150/- a mile a week on the Nanjangud-Chamarajanagar Section with prospects of a considerable increase after the traffic is fully developed. For the purposes of estimate, taking earnings at --

Rs.150/-

Serial No.

-:(5):-

Rs.150/- a mile a week we get

Rs.150 x 20 x 52 = Rs.1,56,000 Gross Earnings per annum.

Deduct 50% Working Expenses = Rs.78,000.
" 5% for hire of rolling stock. .. = " 7,800.
Rs.85,800.

The net receipts per annum are Rs.1,56,000
minus 85,800
= Rs.70,200.

or Rs.200 per annum more than the annual interest on capital cost calculated at 7 per cent.

From the above conservative estimate it would appear that the railway, if built as a light railway and worked by Government at 50 per cent of its gross receipts, should pay its way from the first and that it will be only necessary to continue the cess to pay off the borrowed capital. As the total capital will be Rs.12,00,000 and the annual income of the Board from cess and net railway receipts combined will amount to Rs.52,000 plus Rs.70,200 = Rs.1,22,200 the Board should be in a position to pay off the whole of the borrowed capital in less than 10 years.

30/1/22

First Member)

Respectfully submitted in Council with Diwan's note.

7-2-22

Diwan

RAILWAY SECRETARIAT RECEIVED 7 FEB 22 DAIRY NO. GOVERNMENT OF INDIA

DEWAN'S OFFICE Recd. on FEB 7 1922 Dep. No. 4446

Serial No.

-:(5):-

Rs.150/- a mile a week we get

Rs.150 x 20 x 52 = Rs.1,56,000 Gross Earnings per annum.

Deduct 50% Working Expenses = Rs.78,000.
" 5% for hire of rolling stock. .. = " 7,800.
Rs.85,800.

The net receipts per annum are Rs.1,56,000
minus 85,800
= Rs.70,200.

or Rs.200 per annum more than the annual interest on capital cost calculated at 7 per cent.

From the above conservative estimate it would appear that the railway, if built as a light railway and worked by Government at 50 per cent of its gross receipts, should pay its way from the first and thereafter it will be only necessary to continue the cess to pay off the borrowed capital. As the total capital will be Rs.12,00,000 and the annual income of the Board from cess and net railway receipts combined will amount to Rs.52,000 plus Rs.70,200 = Rs.1,22,200 the Board should be in a position to pay off the whole of the borrowed capital in less than 10 years.

30/1/22

First Member)

The Hon'ble Minister in Council with Dewan's apl.

7-2-22

RAILWAY SECRETARIAT RECEIVED 7 FEB 22 DAIRY NO. GOVERNMENT OF MYSORE

DEWAN'S OFFICE Issued on FEB 7 1922 Reg No. 4446

Serial No.

4146

RAILWAY SECRETARIAT
RECEIVED
16 FEB 22
DAIRY NO.

Yes Cm 17/2

B 1922

The interest at 7 per cent. on a capital cost of Rs.12 lakhs will be Rs.84,000 and not Rs.72,000 as assumed in the note.

2. The amount available towards repayment of Capital after meeting interest charges on the capital will not be Rs.1,22,200 but only Rs.59,200 as indicated below:-

RECEIPTS.-

1. Net receipts of working	Rs.70,20
2. Interest on accumulated cess of 3 lakhs at 7 per cent.	21,00
3. Railway Cess	52,00
	Rs.143,20
INTEREST ON CAPITAL	84,00
Amount available for repayment of Capital	59,20

3. This will be the amount also if the accumulated cess is utilised towards capital expenditu and the amount borrowed is reduced to Rs.9 lakhs, in which case the capital may be paid off in ten t eleven years if the annual instalment of Rs.60,000 is allowed to accumulate at 7 per cent., compound interest.

4. May be considered in Council.

CS 21/2/22

RAILWAY SECRETARIAT
20 FEB 1922
DAIRY NO.

69 18/2

1960 14/2/22

Member Cm 17/2/22 15/2/22 Chief Secy. Cm

7

(For Disposal at a Meeting)

No. C. 396

1921-22

GENERAL AND REVENUE SECRETARIAT.

Council Matter.

SUBJECT.

(Clause xii of the schedule.)

Completion of the construction of the Nanjangud-Chamarajnagar Railway at a total cost of Rs.12 lakhs.

CIRCULATED TO THE MEMBERS OF COUNCIL.

By Order,

Chief Secretary to Government.

22nd February 1922.

Extraordinary Member of Council. 3.3.22.

First Member of Council. Seen.

4506-172 23.2.22 **Second Member of Council.** Opinion recorded 24.2.22

Third Member of Council. 27/2

8

(For Disposal at a Meeting)

No. C. 386
.....f.....1922-23

GENERAL AND REVENUE SECRETARIAT.

Council Matter.

SUBJECT.
(Clause xii of the schedule.)

Completion of the construction of the Nanjangud-Chamarajnagar Railway.

CIRCULATED TO THE MEMBERS OF COUNCIL.

By Order,

23rd February 1923.

Chief Secretary to Government.

Extraordinary Member of Council.

First Member of Council. Seen.

Second Member of Council.

5-5-32
23-2-23

Third Member of Council.

Serial No.

From what Mr Bell told me when he was here in July last year as also some information which has reached me subsequently, how does it appear the much probability of Ranjangud being linked up with Erode via Chamarajanagar for many years to come. The idea would appear to link up Ranjangud with Shoranur via Manantoddy. This would be in the direction of developing the hinterland of the western Ghats as proposed by Mr Richards. It would help to develop the very rich mineral resources - tract of the Wynaad also the valley of the Kabani in our own State. In the light of this it seems to me that the idea of constructing the Ranjangud Chamarajanagar section on the main line Standard need not be considered at present. It would quite serve the purpose if it was constructed & worked as a light feeder line as suggested by the Rly Bd in his note above

Serial No.

The Bd appear to be keen on the stoppage of construction work on this section. The inevitable has yet caused great disappointment. I am therefore in favour of this work being taken up again, as indicated as a link in a main or trunk line but a light feeder in continuation of the Regone Sanjamps section. The Estimate made by the Agency is conservative & I do not think any risk with be run in accepting

Peel
24.2.22.

11

Extract from the Proceedings of the 601st *Meeting of the Council of His Highness the Maharaja, held at Bangalore on the* 8th March 1922.

217. Subject. - Clause xii of the schedule.

Completion of the construction of the Nanjangud-Chamarajnagar Railway at a total cost of Rs. 12 lakhs.

OPINION OF THE COUNCIL.

The Council are in favour of the line being complete as a light feeder railway (metre gauge) if the Mysore District Board are agreeable to raise a debenture loan and provide for interest and sinking fund out of their resource including the railway cess.

(Signed) A. R. Banerji,
First Member of Council
in charge.

"EXTRACT"

Chief Secretary to Government.

WD 1471—GPB—2,000—1-3-21

C 396

WD—A2089—GPB—500—1-5-18

19

G. R. S. III-2].

General and Revenue Secretariat.

File No. of 1921-22

*23. As soon as circulation is complete and the opinion of the Council is recorded, the file will be forwarded to the Secretary in the Department concerned for transmission if need be to the Financial Secretary under Standing Orders and for submission to the Dewan or Member in charge.

Forwarded with compliments to the Secretary to Government Railway Department under *Rule 23 of the Subsidiary Rules of Council Business.

By Order,

9/3

Chief Secretary to Government.

Cow 10/3

10.3.22

Sent for orders.
May a D.O.N. be issued pushed up.

14/3

D.O.N. submitted.

15/3

Cw 15/3

1960 15/3/22

1st Member 15/3

21.3.22 15/3

Cow 21/3

1960 15/3/22

Dewan 15/3

DEWAN'S OFFICE.
Recd. on MAR 21 1922
Reg. No. 4941

NOTE.—Cotn. Sheet.

13

Final Note by the First Member of Council.

Subject:— *Completion of the construction of the Nanjungud-Chamarajanagar Railway at a total cost of Rs.12 lakhs.*

In Government Order No.R.929-31/L.B.123-17-11 dated 10th July 1919, the construction of the Nanjangud-Chamarajanagar-Hardanhalli section of the Nanjungud-Erode Railway was directed to be undertaken by Government.

2. The construction of the section was commenced on 1st November 1919 under sanction conveyed in Government order No.R.S.783-92/Ry. F.16-G-19-20 dated 28th October 1919.

3. Subsequently, Government in their order No.1341-44/Ry.F.16-G-20-21 dated 31st March 1921, directed that the construction of the line be stopped to give preference to the open line works and until the financial situation improves.

4. Now certain inhabitants of Nanjangud having submitted a memorial dated 12th December 1921 to His Highness praying for the early completion of the line, the Railway Secretary states that if the line were to be constructed as a light feeder railway on the same metre gauge using second-hand 41¼ lbs., rails released from the Nanjangud-Bangalore section or from the Harihar-Bangalore main line instead of with 40 lbs rails, the estimated cost of the line can be reduced to Rs.12 lakhs; and if the railway is worked by Government at 50 per cent of its gross receipts, it should pay its way from the first and that it will be only necessary to continue the cess to pay off the borrowed capital in less than 10 years.

5. The matter was considered by Council and they are in favour of the line being completed as a light feeder railway (metre gauge) if the Mysore District Board are agreeable to raise a debenture loan and

provide for interest and sinking fund out of their resources including the railway cess.

6. I solicit the gracious approval of His Highness to the resolution of the Council and the District Board being informed of this to obtain their views in the matter.

Bangalore,
21st March 1922.

21 3 22.

×

19

Record of Cases submitted for the Orders of His Highness the Maharaja

Subject.

Construction of the Nanjangud-Chamarajanagar line as a light feeder railway.

723

Order.

~~KRW~~

25/3/22

Rly reg

763

263

C 396.

17.

G. R. S. III-2.]

General and Revenue Secretariat. | File No. of 1921-22.

Serial No.

31. All urgent or confidential files returned with His Highness' orders may, in the absence of instructions or indications to the contrary, be ordinarily circulated to the Members of Council for perusal after the issue of orders.

33. The Secretaries concerned should see that orders in the cases referred to above are issued at once and that the files are returned immediately after to the Chief Secretary for circulation to the Members.

34. In all other cases, the files will first be circulated to the Members of Council at headquarters and then sent to the Secretariat concerned for the issue of orders.

Circulated to the Members of Council for perusal of His Highness' orders $\frac{\text{before}}{\text{after}}$ issue of orders. (*Vide* Rules 31, 33 and 34 or the Subsidiary Rules for the conduct of business of Council in the Manual of Council Rules and Procedure.)

2873

Chief Secretary to Govt.

Through the Secretary to Government,

..... Department

FIRST MEMBER OF COUNCIL

SECOND MEMBER OF COUNCIL Seen

Orders early

31. 3. 22

THIRD MEMBER OF COUNCIL.

NOTE.—Contn sheet.

WD 923—GPB—500—3-11-21

S 110-289

28. 3. 22

Railway Secy. with Compliments

Serial No.	
	Draft submitted for appl.
	5/4 Appd 5/4
2	Letter issued to the President, B.N. Rly, Nagpur, Vide No 3173 dated 5-4-22
3	A/c Petn dated 11-4-1922 from Hon: V.S. Srinivasiah of Nanjangud Re Construction of N.C. Rly -
	& appg the petitioner will be informed that the matter has been referred to the Bd. Boards in regard to funds. -
	18/4 File is not complete where are the previous communications of the petitioner submitted; Vide F. 1699 20-21. 18/4
	18/4 & 19/4 Reply that the matter has been referred to the President B. Board to whom he may apply for further information.
Hon. R.J. 19/4	Draft submitted 18/4
	19/4 19/4
4	Letter issued; Vide No 3333 dated 19-4-22
5	Letter No C. 1578/L.B. dated 11th July 1922
"	from the President, B.N. Rly stating that the question of raising a Debenture loan for the N.C. Rly was placed before the Distt Board

Serial No.

meeting held on 24.6.22 when the subject was deferred to the next meeting on 19.8.22.

154
19/7/22

may be sent to the 1st Member for info.

SM 18/7

19/7 (Initials) 19/7

Cw 19/7

874-294
24.7.22

1st Member

SE&R

Rec'd
25.7.22

Dewan for information

Cw 26/7/22

RAILWAY SECRETARIAT RECEIVED. 26 JUL. 1922 Diary ... GOVERNMENT OF MYSORE

D.no. 154
26.7.22

DEWAN'S OFFICE. Rec'd on JUL 27 1922 Reg. No. 705

Ser 27
26

1192-132
5.8.22.

SE&R

Rec'd
2.8.22.

RAILWAY SECRETARIAT RECEIVED. 9 AUG. 1922 Diary ... GOVERNMENT OF MYSORE

CI 9/8

SM 9/8

6 The views of the Dt Board may now be awaited.

Cw 7/8

Received the Dist Board on the 20th inst

SM 8/8

P.U.D. 9 Letter no. C.1578 L.B/21-22 dated 16-9-22 from the President District Board, Mysore intimating that the subject has been deferred for the next meeting to be held on 25th Nov. 1922

G. R. S. III-21

General and Revenue Secretariat.	File No.	of 19

Serial No.

This will be kept pending and in the meanwhile the file may be submitted to the Dewan Sahib for information.

Submitted.

Alw
18/9

19/9

SM 19/9

1.54
23/9

2918-524.
30.9.22.

1st Member
SEBn.

Alw
21/9

Alw
1.10.22

The Dewan
Sahib.

WT
8.10

DEWAN'S OFFICE.
Rcd. on OCT - 1922
Reg. No. 2087

RAILWAY SECRETARIAT
RECEIVED.
10 OCT. 1922
Diary No.
GOVERNMENT OF MYSORE.

12/10

may be returned

Record SM 13/10

8M 12/10
12

Letter No. Sec: III-LB/22-23 dated 23rd Dec: 1
from the Sec: Commrs, Mysore Dist, Stating that
the District Board are willing either to
raise a Debenture loan or to borrow
money from the Mysore Bank for Comple
the construction of the Nanjangud-Chamrajnagar
Railway line.

Submitted with reference to Council Resolu-
tion on Page 9 & orders of Govt thereon on
Page 14 of Notes.

Engs B & D

The terms on which the Govt should work the line
may now perhaps be taken up for
consideration

31/12

SM 2/1/23

NOTE—Contn. sheet.

Serial No.

I think that before they go further the District Board should know the terms on which the Ry. Deptt will work the railway.

After further consideration I think that we should get 60 per cent of gross receipts and charge 5 per cent for hire of rolling stock. If, to be on the safe side, we take earnings per mile per week at Rs 120/-

(1) Gross earnings = 120 × 22 × 52 = Rs 1,37,280

(2) Working Expenses @ 60% = Rs 82,000

(3) Hire of Rolling Stock @ 5% = Rs 6864

(4) Net earnings = Rs 48,416

(5) Interest on cess so far collected (about 3 lakhs) @ 7% = Rs 21,000

(6) Annual cess collection = Rs 52,000

(7) Total of items (4), (5) & (6) = Rs 1,21,416

(8) Interest of loan of 12 lakhs @ 7% = Rs 84,000

(9) Net amount available for working as a working funeral after paying interest charges } 1,21,416 − 84,000 = Rs 37,416

1st Member 6/1/23

D.154 6.1.23.

MRM—RS 464—1000—24—6—22

8.9.0

Serial No.

S.745-429
15.1.23

It seems to me that Earnings @ Rs 120/- p.c.p.m. is too high. The MA section after 5 years working is still giving Rs 100/- p.c.p.m. Chamrajnagar is a dead end & I do not think the Earnings will be higher. I do not know if the Earnings of the MYS-NNG section can be taken as a safe guide. Next 60 p.c. of gross receipts for working Expenses would seem to be on the low under Existing conditions.

Rail. 16.1.23

Genl. Secy
With Compts
for Expression of opinion

RAILWAY SECRETARIAT 20 JAN 1923 1160-8

Before this question is pursued further, I think it is necessary to consider what are the prospects of the District Board being abl to find as much as 12 lakhs required for the construction of this line. The resolution o the Board records the willingness of that bod to raise a loan. But what are the general terms of the contemplated loan and what is likely to

MRM—RS 464—1000—24—6—22

Serial No.

to be the response of the investing public to the proposed loan? None of the District Board issues tried in the past has been a success. The rates of interest offered in respect of these issues were considered good enough at the time; but in spite of this fact the response was very poor in every case.

Every District Board or Company Railway venture in the past has really been an addition to the Railway capital programme of Governmen District Boards issued prospectuses inviting subscriptions to their loans and the construction of railways was started. There was no response to the ø loans and the consequence was that Government had to find the money par ly ow wholly from their own capital resource I am strongly of the opinion that such situa tions should not be created in the future.

The alternative proposal of the Distric Board that in the event of their being unab to raise a public loan, they would borrow th amount from the Bank of Mysore is simply i practicable. This bakk will not and it ou

MRM—RS 464—1000—24—6—22

Serial No.

ought not to lend money for the fixed capital of railways or other concerns. The current-account and short-time deposits funds at the disposal of a bank like the Bank of Mysore cannot be invested in long-term loans of this kind

The proposal of the Railway Secretary that District Board Railways should be worked by the Main line for a fixed share of gross earnings is, no doubt, a desirable arrangement. But, the adoption of any such arrangement will involve considerable risk to the Main line so long as the ratio of working expenses to gross receipts continues to be as high as it has been for some years past. We have not followed this arrangement in respect of either the B.C.L. railway or the K.D. railway. The only safe arrangement, until the relation of working expenses to gross receipts reaches some measure of stability, is to distribute the total revenue charges in the ratio of the gross receipts of all the lines - Main and Worked.

This is the arrangement which now obtains in

They are not feeders to our system Con

Not would not be fair to the benefit for the interchanged Traffic Co

20/2

MRM—RS 464—1000—24—6—22

G. R. S. III-2]

General and Revenue Secretariat. | File No. of 19

Serial No.

in respect of B. C. L. and K. D. railways worked by us.

The District Board resolution states that "the amount of the railway cess that has already been accumulated and the annual income from this source should be utilised to pay interest and to provide for forming a sinking fund." The Board therefore expect that their railway cess resources will suffice for meeting the demands on account of both interest and annual contributions to the sinking fund. If this condition can be realised — the calculations made shown — that it is not realisable — there is no objection to resume the construction of this line as a District Board Railway provided, of course, the Board are able to raise the whole amount required by means of a public loan.

Mill 19-1-23

1st Member)

20/1

I have no further remarks to offer. I feel that as regards working Expenses I am inclined to agree with the views Expressed by the Govt. Secy. How far the resources of the D.B. are capable of realisation at the present moment is a matter of considerable doubt. I am afraid

RE 1160-22 20.1.23

6049.733 25.1.23

RAILWAY SECRETARIAT RECEIVED 27 JAN 1923 DEPT. B.1472 CORE

NOTE—Contn. sheet.

G. R. S. III-21

General and Revenue Secretariat. | File No. | of 19

Serial No.

it is necessary to take an optimistic view of it.

Rec 26.1.23 | Com 29/1/23

D.no. 1472 29 1/23

Rec'd 31 1923 No. 4476

I think it is worthwhile making the Secretary Energy & Irrigation see it. The matter may be considered in C

6772-463 19.2.23

Secretary

Rec 20.2.23

31721

Com 21-2-23

Chief Secretary

U.O. no. 152 dt. 2/23

D.no. 1472

Files as per list attached (enclosed)

C.S. 22 FEB 1923

CS 22/2/23

NOTE—Contn. sheet.

Extract from the Proceedings of the 641st *Meeting of the Council of His Highness the Maharaja, held at Bangalore on the* 8th March 1923. *19*

212. Subject. - Clause xii of the schedule.

Completion of the construction of the Nanjangud-Chamarajnagar Railway.

OPINION OF THE COUNCIL.

The District Board may be authorised to raise a debenture loan for the work and may be asked to submit a definite scheme showing the terms and conditions of the loan and the arrangements for meeting the interest and sinking fund charges.

(Signed) A. R. BANERJI,
Dewan of Mysore.

"EXTRACT"

Chief Secretary to Government.

WD 1471—GPB—2,000—1-3-21

C 386

General and Revenue Secretariat.

Subject.—

Completion of the construction of the Nanjangud-Chamarajnagar Railway.

This has been conveyed to the Rly Dept's care, but the present route appears the best as it seems certain that when ores are mined, they should come for L. J. Br

Extract from the Proceedings of the Council is submitted.

5395
12/3/28

and members)

Ku
9/3

Approved
Sd/-
11/3

S. N. Submitted.
4
Sd/- 12/3

Sd/-?

NOTE—Contn. sheet.

Mono WD 1190—GPB—500—9-1-23.

Final Note by the Second Member of Council.

Subject:—

Completion of the construction of the Nanjangud-Chamarajanaga Railway.

Hag D. Reference is invited to His Highness' Order of 25th March 1922 approving of the Resolution of the Council regarding the completion of the Nanjangud-Chamarajanagar Railway as a Light Feeder Line at an estimated cost of Rs. 12 lakhs if the Mysore District Board were prepared to raise a Debenture Loan and provide for interest and Sinking Fund charges out of their resources including the Railway Cess.

P.W.D. The District Board have since intimated that they are willing to rais a Debenture Loan as suggested, supplementing it if necessary by a loar from the Mysore Bank, and utilize the accumulated amount of the Railway Cess levied in the District, with the annual income therefrom, for paying the interest due on the loan and for providing for the Sinking Fund required for its liquidation.

C. The Railway Secretary is of opinion that before the District Board go further the terms on which the Government might undertake to work the Railway should be settled. The Financial Secretary points out that it is doubtful how far in the present conditions of the money market the District Board would be able to raise the loan required and that it is most unlikely that the Mysore Bank would lend

P.S. money for the fixed capital of any concern. He states that the construction of the line as a District Board Railway can be resumed only if the Board are able to raise the whole amount required by means of a public loan and can meet the interest and Sinking Fund charges from their Railway Cess resources.

The

The Council having considered the matter are of opinion that it is expedient to encourage the construction of Feeder Lines by District Boards and they have accordingly resolved as follows:-

"The District Board may be authorized to raise a debenture loan for the work and may be asked to submit a definite scheme showing the terms and conditions of the loan and the arrangements for meeting the interest and sinking fund charges".

The recommendation of the Council may be graciously approved.

Bangalore,
11th March 1923.

MEMBER OF COUNCIL.

G. R. S. IV—6]

Submitted to His Highness.

I submit herewith a Final Note by the SECOND *Member of Council on the subject of* completion of the construction of the Nanjangud-Chamarajnagar Railway, *for His Highness' gracious approval.*

Dewan.

13 MAR 1923

C 38639

Record of Cases submitted for the Orders of His Highness the Maharaja

Subject.

Completion of the construction of the Nanjangud-Chamarajanagar Railway.

Order.

~~KRW~~

17/3/23

752

ln
1913

33

R. S. III-2]

C 386

General and Revenue Secretariat.	File No.	of 192

Serial No.

Completion of the Construction of the Nanjangud – Chamarajanagar Railway.

(*)

31. All urgent or confidential files returned with His Highness' orders may, in the absence of instructions or indications to the contrary, be ordinarily circulated to the Members of Council for perusal after the issue of orders.

33. The Secretaries concerned should see that orders in the cases referred to above are issued at once and that the files are returned immediately after to the Chief Secretary for circulation to the Members.

34. In all other cases, the files will first be circulated to the Members of Council at headquarters and then sent to the Secretariat concerned for the issue of orders.

Circulated to the Members of Council for perusal of

*

His Highness' orders $\frac{\text{before}}{\text{after}}$ issue of orders. (*Vide* Rules 31, 33 and 34 of the Subsidiary Rules for the conduct of business of Council in the Manual of Council Rules and Procedure.)

Chief Secretary to Govt.

Through the Secretary to Government,

.....Department.

7688-5-61
21.3.23

FIRST MEMBER OF COUNCIL. 22.3.23

6209
20-3-23

SECOND MEMBER OF COUNCIL. 21/3/23

THIRD MEMBER OF COUNCIL.

To The Revenue Secy, with Compliments for favour of further action.

NOTE—Contn. sheet.

Mono WD 1335—GPB—500—16-1-23.

22/3/23

G. R. S. III-21

5661
5334

264

General and Revenue Secretariat. | LS File No. 129 of 1922.

Serial No.	
	A draft is put up for approval. Kind reference is invited to the Chief Secy's note dated 9.3.23 suggesting that the order may issue from the L.S.G Branch. (Rev: See:) CSB 29.3.23
1 10/2.4.23	Secd Member) RLP 31/3/23
	CSB 31.3.23 Draft appd
	RLP 3/4. RLP 3/4/23
	Issue CSB 3.4.23
2	To the Govt. of H.H. the Maharaja of Mysore " Financial Secy to Govt " Comptroller to Govt " Secy to Govt for Railways No L 6971-4 dt 9.4.23. Authorizes the Mysore Govt to raise a Debenture loan for the completion of the work of the Arsikere Chamrajnagar Railway.
3	From the Secretary to Govt Mysore Railways. No RS. 2414 dated 14th April 1923 Requests the return of the file of papers of the Rly Deptt leading to the issue of the G.O 81.3. Submitting a draft. VB 20/4 Issue CSB 20.4.23

NOTE—Contn. sheet.

G. R. S. III-2]

5334

General and Revenue Secretariat. | LB File No. 129 of 1922

Serial No.	
4	To, The Secretary to Govt. Mysore Railways No. L 7261/a 30.4.23 Returns the file of papers

RECEIVED 1923 B'ore Jud. DRANCH

NOTE—Contn. sheet

MYSORE RAILWAYS

NANJANGUD-MYSORE FRONTIER

SECTION OF

NANJANGUD-ERODE RAILWAY

Metre Gauge. Length, 33·11 Miles.

Report and Construction Estimates

1919

WD 376—Govt. Branch Press, Mysore—150—26-6-19.

MYSORE RAILWAYS

NANJANGUD-MYSORE FRONTIER

SECTION OF

NANJANGUD-ERODE RAILWAY

Metre Gauge. Length, 33·11 Miles.

REPORT AND CONSTRUCTION ESTIMATES

1919

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NOTE ON THE MYSORE SECTION OF THE NANJANGUD-ERODE RAILWAY.

IN the year 1898 a reconnaissance survey was made by the South Indian Railway for a Railway line from Erode to Nanjangud and a report together with a rough estimate of the cost of construction was submitted to the Consulting Engineer for Railways, Madras. In this rough estimate the probable cost for 33·79 miles of Metre Gauge Railway in Mysore Territory was put down as Rs. 20,81,764 with a mileage rate of Rs. 61,608 with rolling stock at Rs. 7,138 per mile as per Appendix I.

2. A detailed survey was next carried out by the same administration between the years 1909 and 1911 for the whole length between Nanjangud and Erode with a branch from Kottamangalam to Mettupalaiyam and a report and construction estimate was prepared by Mr. G. W. Moore, their Chief Engineer in 1912. According to this estimate the cost of 33·11 miles in the Mysore State is Rs. 14,51,940 with a mileage rate of Rs. 43,852, without rolling stock, with 2·67 per cent as the return on the capital expenditure. Extracts from the report and construction estimates of this detailed survey which particularly relate to the Mysore Section are reprinted in Appendix II. The South Indian Railway Construction Estimates were received by this Government in November 1913.

3. In March 1916 Mr. G. Richards, Engineer-in-Chief, Mysore and West Coast Railway Survey, Bangalore, was informed by the Railway Board that in connection with the recent and proposed railway developments in the Mysore State, the Government of India have had under consideration the question of the construction of a line of railway on the metre gauge between Nanjangud and Erode. The primary object of the Nanjangud-Erode Railway would be to link up the metre gauge systems of the Mysore State and the South Indian Railway by a shorter route than at present exists *via* Dharmavaram and Katpadi and thus afford a more direct outlet towards the south for the trade of the State. The Board also directed him to undertake a detailed enquiry into the traffic prospects of this line and an examination in detail of the effect of this construction on adjoining railways. (See Appendix.) Mr. Richards accordingly wrote a note on the traffic prospects of the projected Nanjangud-Erode Railway which is reprinted as Appendix III.

4. On the 18th December 1916 the First Assistant to the Hon'ble the Resident in Mysore was further addressed by the Secretary to the Government of Mysore for Railways on certain points raised in Mr. Richards' above traffic note and extracts from same are printed as Appendix IV.

5. A further note by Mr. Richards concerning the traffic prospects of the line received in connection with the letter referred to in para 4 was received with Residency No. 4683, dated 19th June 1917 and is reprinted as Appendix V.

6. While the question of the construction of this line was recently receiving urgent attention, the question of taking the main line through Santemarahalli and to be as close as possible to T.-Narsipur was raised. As a result of the preliminary investigation on this matter it was found that the length of the line would be increased by nearly 8 miles whereas the traffic prospects do not seem to justify this increase in length of a direct connection from Mysore to South India. A report from the Agent, Mysore Railways, with Government orders on same on this subject is printed as Appendix VI. Instructions were then given to the Superintending Engineer for Surveys to revise the construction estimate for the Nanjangud-Mysore Frontier Section based on the field work and project of 1909-11 of the South Indian Railway, with a view to bring it to date concerning rates and other matters.

Nanjangud-Erode Railway.

MYSORE STATE SECTION.

REPORT BY H. D. RICE, SUPERINTENDING ENGINEER, MYSORE RAILWAYS SURVEYS.

PROJECT OF 1919.

I. History and Geography.

1. Two surveys have apparently been completed by the South Indian Railway Company, Limited, one in 1898 and the other in 1909-11. The first of these was a reconnaissance survey and the second a detailed survey—for the whole line from Nanjangud to Erode. The latter survey also included a branch line from Kottamangalam to Mettupalaiyam. The present report refers only to the Mysore State Section of the Railway, the length of which is 33·11 miles.

2. In August 1918 the present writer was asked to report upon the advisability of an alternative route in the Mysore Section *via* Santemarahalli to Chamarajanagar in order to bring T.-Narsipur, Kollegal and Yelandur nearer the Railway and at the same time tap the big market at Santemarahalli. After reconnoitring the country I reported that from an engineering point of view there was no difficulty whatever in aligning it as suggested, but considering the line forms part of the very important connecting link which will give metre gauge communication between the southern-most parts of the Indian Peninsula and the Bombay Presidency it would be very unwise to increase its length by 8 miles, unless extra traffic could be depended upon.

3. In the report accompanying the 1912 Project (1909-11 survey) it is stated that the local traffic does not justify the construction of the line, and that its construction can only be justified on account of the fact that it will give through connection between the south of India and the Bombay Presidency. This argument is perhaps not as strong now as then, as the amount of local traffic may have increased.

4. Santemarahalli is a trading centre of much local importance but it is only busy on one day a week when the market is held. The Railway would undoubtedly obtain extra traffic if it passed through Santemarahalli but I am of opinion that the inducement is not sufficient to justify the lengthening by 8 miles of what, in the near future, will be an important main line.

5. As regards the question of giving better Railway communication to T.-Narsipur, Kollegal, Yelandur and Santemarahalli which the local Government are anxious to do—it may be pointed out that all these places will be very much better served when the Mysore Section of the Nanjangud-Erode Railway is built (on the alignment already surveyed), and the whole of their traffic is likely to come to the Railway without taking the Railway 10 miles nearer to them by diverting it through Santemarahalli. T.-Narsipur which is

now 19 miles from the Railway at Nanjangud will also be 19 miles from it at Chamarajanagar. Kollegal which is now 35 miles from the Railway will be only 24. Yelandur which is 27 miles will be 14 and Santemarahalli which is 23 will be 10.

6. In my opinion the line as surveyed in 1909-11 cannot be improved in Mysore Territory—that is supposing the route outside Mysore is the correct one.

7. Orders have now been received to revise the estimate prepared in 1912 for the Mysore Section only, utilising the 1909-11 survey of the South Indian Railway Company.

8. The above is a brief history of that part of the project that concerns the local Mysore State Section. The bigger question of the history of the whole line does not come within the scope of the present report. It is however well known, as the Nanjangud-Erode connection has been discussed now for many years. The reasons for the line not having been undertaken earlier need not be entered into here. The object now in view is to complete the first part of a line,—that lies within Mysore State—which will eventually complete metre gauge communication between the East of India and the Bombay Presidency. The other link in reducing the through distance is the line from Mysore to Arsikere—Hassan which has been recently completed and opened and is now earning about Rs. 80 per mile per week with its limited Rolling stock.

9. *Geography.*—Erode, the ultimate terminus of the line is now the terminal station of the Trichinopoly-Erode metre gauge Branch and it is the junction station of that line and the Broad Gauge Madras-Bangalore and West Coast lines. Nanjangud is the present terminus of the Bangalore-Mysore-Nanjangud metre gauge line. The country between Nanjangud and the Mysore Frontier is prosperous and well cultivated for 27 miles out of the 33·11 miles, the remaining 6 miles being light jungle. Chamarajanagar is the head-quarters of the taluk of that name and is a prosperous town of 6,500 inhabitants. There are no other large villages on the line. The rainfall of Chamarajanagar is 24 inches. The greater portion of the country drains into the Kabbani and Cauvery.

II. Gauge, Length, Fixed Point, Gradients, Curves.

10. *Gauge.*—The estimate is for a metre gauge line.

11. *Length.*—The survey carried out by the South Indian Railway Company—upon which the present estimate is based—was from Erode to Nanjangud. The total distance is 119·22 miles, the Mysore State portion being from 86·11 to 119·22 or 33·11 miles.

12. *Fixed Points.*—The fixed point or zero of mileage of the 1912 project was the centre of Erode platform. As the present project concerns the State section of 33·11 miles from Nanjangud the fixed point will be the extreme end of Nanjangud Town Station when the necessary changes are made in the 1912 survey on account of the direction being reversed.

13. *Gradients, Curves.*—The ruling gradient of the Mysore Section and of the whole line, except the Ghat, is 1 in 100 uncompensated. There are a few curves of 6 degrees near the Mysore Frontier but in the rest of the Mysore Section, with the exception of a few 5 degrees curves, curves flatter than 5 degrees have been used. It is now proposed to compensate all curves on the Mysore Section at the rate of 0·03 per cent per degree. This can be done by the construction engineers when the work is started.

III. Location.

14. The country between Nanjangud (0) and Hardanhalli (27·14) is open and well cultivated. From Hardanhalli to the Frontier it is hilly, broken and rocky, the jungle being small and only of value for fuel. For estimating purposes the length of 33·11 miles is divided into two sections the first from

Nanjangud to Hardanhalli which is well populated and prosperous and the second from Hardanhalli (27·14) to the Frontier (33·11) which is practically unpopulated. The object of dividing it into two sections is to complete the first section as a "first stage" and omit the second stage which is through unprofitable country until the portion in British Territory is undertaken.

15. A proposed deviation from the projected alignment has been mentioned in para 2. No remarks are necessary as regards the junction (Nanjangud). Nothing further is needed there until the line is extended to Erode as the trains from Mysore will run on to Chamarajanagar and back instead of stopping at Nanjangud. Other stations on the Mysore Section are—

(Nanjangud 0) W. G.
Badanval 7·35 Flag.
Badanguppi 15·01 III Class.
Chamarajanagar 22·14 II Class W.G.
Hardanhalli 27·14. Terminal.

In the Project of 1912 prepared by the South Indian Railway Company Badanval, Badanguppe and Hardanhalli are crossing Stations and Chamarajanagar a Third Class Station. But until the extension of the line to Erode is undertaken there will only be need of a crossing station at Badanguppe. As Chamarajanagar is an important place of local trade a II Class Station is proposed.

16. There are two major bridges across the Goondal River just outside Nanjangud and across the Jogatti Halla in mile 32. At the former 5 spans of 40 feet girders and at the latter 3 spans of 40 feet girders—provided in the 1912 Project—are repeated here.

IV. Alternative Routes and Possible Extensions.

17. These questions have already been referred to.

V. Relations with the Public and with the Military and other Government Departments.

18. There are no military cantonments, buildings or communications on the railway.

19. It is stated in the report accompanying the 1912 Project that stations have been fixed in consultation with the local authorities. Waiting rooms will be provided at Chamarajanagar, but not at the other stations.

20. Religious edifices and sacred places are not interfered with.

VI. Construction and Engineering.

21. *Labour and Materials.*—Local labour for light earthwork can be procured for a few months in the year while agricultural operations do not occupy their attention. The bulk of the labour must be imported as is the case for all big works in the State.

22. Materials are available locally, the principal once being :—

Stone for bridges—all along the line.
Bricks for buildings—can be prepared almost anywhere.
Kunker for line—procurable locally.
Cement for mortar—from Madras by rail.
Tiles for roofing—from the Mysore Depôt.
Timber—from the Mysore Depôt.

23. *Arrangement of Staff.*—Administrative Head-quarters are at Mysore. Head-quarters of the Division may be Nanjangud. The establishment proposed for the first section is one Executive Engineer with a Divisional establishment and two Assistant Engineers with Sub-Divisonal establishments for 24 months. For the second section of 6 miles to be done later one Sub-Division for 12 months is provided, with an Overseer in charge working direct under the Executive Engineer.

24. *Standard proposed.*—The standard proposed is that of the Mysore-Arsikere Railway lately completed details of which are noted in the subsequent remarks on each main head.

25. *Preliminary expenses.*—The actual cost of the surveys of 1898 and 1909-11 amounting to Rs. 55,000 could have been taken, the figures being obtained from the South Indian Railway Company estimate. Rs. 200 has been added for finally pegging out the line, which will be ample considering the marks of the 1909-11 survey are all in existence.

26. *Land.*—The rates allowed in the 1912 estimate are practically identical with the present rates of compensation but Rs. 21,900 allowed in account of "capitalised abatement of land revenue" has been omitted as it is not usual to make provision for this in the Mysore Railway Projects. Six months is allowed for the employment of the Revenue Staff for the acquisition of land. On the Mysore-Arsikere Railway the acquisition of land occupied the Revenue Staff 15 months for 102 miles—so six months for 27 miles is the rate.

27. *Formation.*—The earthwork quantities have been taken out from the detailed sections of the 1909-11 survey. The formation width of the banks is 14 feet with side slopes of 2 to 1 in soft and black cotton soils and 1½ to 1 in compact soils. The bottom width of cuttings is 16 feet with side slopes of 1 to 1 in earth and from ¼ to 1 to vertical in hard soils and rock. For rates see Appendix. A top dressing of 12 cubic feet per lineal foot of selected material to be delivered by ballast train is allowed for all banks. Miscellaneous charges and maintenance charges are provided. Side and catch-water drains are provided for all cuttings. The earthwork is on the whole very light. 10 per cent is added for the settlement of banks and 10 per cent for washaways during the monsoon.

28. *Bridge work.*—There are 2 major bridges across the Grand River in mile 1 and across the Jegatti Halla in mile 32. The former has 5 spans of 40 feet girders at the former and 3 spans of 40 feet girders at the latter mile in the 1912 Project is allowed to stand as they meet requirements. The rates therein allowed are however too low as I have been informed that Rs. 150 and Rs. 130 per lineal foot to Rs. 250 and Rs. 300 respectively would be higher than for similar bridges on the Mysore-Arsikere Railway. No additions are contemplated in building these bridges. The same provision for minor bridges as is shown in the detailed estimate of the S. I. Railway for the Mysore Section is also allowed to stand in this estimate but the rates have been increased to conform to what has been found necessary from experience gained on the Mysore-Arsikere Railway. An analysis of rates for the steel work of girders is not prepared as the rates cannot be ascertained at present with any degree of accuracy.

29. *Fencing.*—One mile of fencing is provided in Nandidrug and Town limits and none elsewhere. There are 7 II Class Level crossings and 88 III Class which is a liberal provision for 88 miles. The level crossings are classified as per notes in the Engineering Manual.

30. *Electric Telegraph.*—No provision is made. The existing line along the road will not be needed when a line is installed for the railway.

31. *Ballast and Permanent Way.*—50lb. rails on teak sleepers are provided. The traffic at first will only require a lighter permanent way but in consideration of the probable extension to Erode at a future date the heavier road is provided once and for all. A detailed estimate of one mile of permanent way appears in the estimate portion.

32. Sleepers will be provided by the Mysore Forest Department from the forests in the Mysore District. Teak sleepers are recommended as being the only durable variety available in large numbers from the local forests. The Conservator of Forest has quoted the rates entered (Rs. 6-0-0). A copy of his letter on the subject is attached in this Rates Section.

33. Ballast consisting of broken stone is available throughout the line.

34. *Stations and Buildings.*—As already mentioned in para 14 there are 2 Flag Stations, 1 Crossing Station and 1 II Class Station in the Mysore Section, *viz.*:—

(Nanjangud O. W. G.)
Badanval 7·35. Flag.
Badanguppe 15·01. III Class.
Chamarajanagar 22·14. II Class W. G.
Haradanhalli 27·14. Flag. Terminal.

All these lie in the length to be undertaken as the "first stage." Platforms will be 600 feet long and of the rail level type. The Locomotive Engineering and Carriage and Wagon Workshops are being built now at Mysore under a separate estimate and hence no provision is needed in this estimate. Administrative offices are also at Mysore from where the construction of the line can be conveniently controlled. Permanent Staff-quarters are provided at Chamarajanagar and temporary quarters at the Flag Stations the type of the former being similar to those on the Mysore-Arsikere Railway. The Head-quarters Officer's resident at Mysore will control this line also, so no quarters are provided under this estimate. The distance from Mysore to Chamarajanagar and back will be 77 miles and to Haradanhalli and back 83 miles, which forms one engine run, hence no engine changing arrangements are needed. Loco watering arrangements are provided at Chamarajanagar and they already exist at Mysore and Nanjangud. Signalling arrangements similar to the Mysore-Arsikere Railway are provided.

35. *Plant.*—There are no specially important construction works and hence Plant of a special nature is not required. Even for the major bridges across the Goondal and Jogatti hallas ordinary hand pumps will suffice. A liberal provision has however been made.

36. *Rolling Stock.*—The stock in use now will be available but an allowance of 12,000 a mile is made which will probably allow for the purchase of sufficient stock to run one local train from Nanjangud to Chamarajanagar and back daily with spare goods vehicles. This will suffice for the first equipment. This is only a lumpsum provision. Details may be discussed later with the Traffic Manager, Carr and Wagon Superintendent and Loco Superintendent. The provisions made are liable to alteration later.

37. *General and miscellaneous charges.*—The line will be constructed by the Mysore Railway Department. As the cash expenditure in works only amounts to about Rs. 8 lakhs a period of 24 months is allowed which gives an average monthly expenditure of Rs. 35,000. An Executive Engineer with two Assistant Engineers and a Divisional Staff with two Sub-Divisional Staffs are provided—the Head-quarters being Nanjangud.

38. *Cost of Construction.*—In the 1912 Project prepared by the South Indian Railway Company, the line was estimated to cost Rs. 43,852 per mile excluding Rolling Stock. It is now estimated to cost on identically the same alignment Rs. 78,809 per mile including or Rs. 66,809 excluding Rolling Stock. The differences have been explained in the remarks on each main head of the estimate.

VII. Traffic and Dividend Prospects.

39. As already stated it is doubtful whether the construction of the line would be justified if viewed solely from the stand point of dividends on capital cost. The gross earnings from local traffic are not likely to be more than Rs. 80 per mile per week for some time, with the one train a day each way which is expected to be sufficient at first. But the importance of the whole line, and of this section of it, rests in the fact that it will give through metre gauge communication between the southernmost parts of the Indian Peninsula and the Bombay Presidency. The Mysore-Arsikere Railway has recently been completed which reduces the through distance by 20 miles, but this line cannot reach its full earning capacity until the Nanjangud-Erode line is built. The great importance of the Nanjangud-Erode line has been recognised for many years and nothing further on the subject need be said here.

NANJANGUD-ERODE RAILWAY.

MYSORE SECTION.

NANJANGUD TO FRONTIER.

LENGTH 33·11 MILES.

GENERAL ABSTRACT OF COST.

NANJANGUD-ERODE RAILWAY.

MYSORE SECTION.

NANJANGUD-HARDANHALLI.

LENGTH 27·12 MILES.

ABSTRACT AND DETAILED ESTIMATES.

Gauge 3'—3⅜" **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

Abstract of Cost.

Heads of account	Cost exclusive of junction				Cost of junction		For whole Railway excluding junction	
	Sub-head		Main head		Main head		Main head	
	Amount	Rate per mile	Amount	Rate per mile	Amount	Rate per mile	Amount	Rate per mile
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
I Preliminary expenses—	...	...	**34,276**	**1,264**		...	**34,276**	**1,264**
(*a*) Survey expenses ...								
(*b*) Plant ...	34,276	1,264	...	...		...	...	...
(*c*) Establishment ...								
II Land—	...	...	**73,334**	**2,704**		...	**73,334**	**2,704**
III Formation—	...	...	**2,62,776**	**9,689**		...	**2,62,776**	**9,689**
(*a*) Earthwork ...	2,58,146	9,519	...	...		...	...	...
(*b*) Tunnels ...	...	...	...	...		...	...	...
(*c*) Walling ...	...	...	...	...		...	...	...
(*d*) Side and catch water drains ...	4,630	170	...	...		...	...	...
IV Bridge work—	...	...	**2,15,340**	**7,940**		...	**2,15,340**	**7,940**
(*a*) Major bridges ...	50,000	1,843	...	...		...	...	...
(*b*) Minor bridges ...	1,65,340	6,097	...	...		...	...	...
V Fencing—	...	...	**14,328**	**528**		...	**14,328**	**528**
(*a*) Fencings ...	1,916	70	...	...		...	...	...
(*b*) Road crossing ...	10,932	403	...	...		...	...	...
(*c*) Mile and gradient post ...	1,480	55	...	...		...	...	...
VI Electric telegraph—	...	...	...	...		...	...	...
VII Ballast and permanent way—	...	...	**9,93,274**	**36,625**		...	**9,93,274**	**36,625**
(*a*) Main line { i Permanent way	8,85,712	32,659	...	...		...	...	...
(*a*) Main line { ii Ballast ...	52,613	1,940	...	...		...	...	...
(*b*) Sidings { i Permanent way	43,436	1,602	...	...		...	...	...
(*b*) Sidings { ii Ballast ...	2,063	76	...	...		...	...	...
(*c*) Points and crossings ...	9,450	348	...	...		...	...	...
VIII Stations and Buildings—	...	...	**1,07,145**	**3,951**		...	**1,07,145**	**3,951**
(*a*) Stations and offices ...	33,180	1,224	...	...		...	...	...
(*b*) Workshops, etc. ...	...	...	...	...		...	...	...
(*c*) Staff quarters ...	32,919	1,214	...	...		...	...	...
(*d*) Station machinery ...	41,046	1,513	...	...		...	...	...
IX Plant—	...	...	**17,628**	**650**		...	**17,628**	**650**
(*a*) Engineering ...	4,068	150	...	...		...	...	...
(*b*) Construction ...	10,848	400	...	...		...	...	...
(*c*) Loco ...	...	...	...	...		...	...	...
(*d*) Carriage and Wagon ...	...	...	...	...		...	...	...
(*e*) Station and office furniture ...	2,712	100	...	...		...	...	...
X Ferries—	...	...	...	...		...	...	...
XI Rolling stock—	...	...	**3,25,440**	**12,000**		...	**3,25,440**	**12,000**
(*a*) Locomotive ...								
(*b*) Carr and Wagon ...	3,25,440	12,000	...	...		...	...	...
(*c*) Motors ...								
XII General charges—	...	...	**1,00,204**	**3,695**		...	**1,00,207**	**3,695**
(*a*) Direction ...	9,983	368	...	...		...	...	...
(*b*) Engineering ...	72,880	2,688	...	...		...	...	...
(*c*) Stores ...	7,312	270	...	...		...	...	...
(*d*) Audit and account ...	4,992	184	...	...		...	...	...
(*e*) Medical and Sanitation ...	5,040	185	...	...		...	...	...
(*f*) Locomotive	...	...	...	...		...	...	...
(*g*) Traffic	...	...	...	...		...	...	...
Grand Total ...	...	...	**21,43,748**	**79,046**	Junction works, if any, will be carried out by the M. & S. M. Railway Company under a separate estimate or by the State Railway if Nanjangud Station is worked by this Administration	...	**21,43,748**	**79,046**

Cost per mile say 41½ lk metres = Rs 72,000

Gauge Metre. **NANJANGUD-ERODE RAILWAY.** **Length 27·12 miles.**

Mysore Section.

NANJANGUD-HARDANHALLI.

I - Preliminary expenses.

Sub-heads	Survey of 1898	Survey of 1909-11	Final location	Total
(*a*) Survey expenses	Rs. 7,367 as per pro-	2,251	...	2,252
(*b*) Plant...	visional detailed	2,367	...	2,367
(*c*) Establishment	estimate	16,866	...	16,866
Final location at 200 per mile	of S. I. R. for 1909-11	...	5,421	5,421
				7,367
Total ...	7,367	21,484	5,421	34,276

Rate per mile Rs. 1,264

Figures taken from the estimate of S. I. R. for [illegible] ... charged on mileage basis.

Gauge 3'-3½" **II—Land.** **Length 27·12 miles.**

Description	Quantity	Rate	Per	Amount
CHAMARAJANAGAR.		Rs.		Rs.
Garden land	5·00	400	Acre	2,000
Wet cultivation	31·00	500	,,	15,500
Dry do	6·00	150	,,	900
Dry do inferior	189·00	50	,,	9,450
Waste land	34·00	15	,,	510
Total ...	265·00	...	..	28,360
NANJANGUD TALUK.				
Town site	15·00	100	..	1,500
Garden site	3·00	350	,,	1,050
Wet cultivation	23·00	500	,,	11,500
Dry do	55·00	100	,,	5,500
Dry do inferior	94·00	50	,,	4,700
Waste land	7·00	25	,,	175
Total ...	197·00	...	...	24,425
Total Rupees ...	...	...	...	52,785
Compensation for wells and trees ...	Lumpsum	Rupees		1,250
do buildings, ...	Lumpsum	Rupees		2,500
Demarcating survey field or Sub-division ...	27·12	35	Mile	949
Extra for compulsory acquisition of land at 15 per cent.	Lump sum	Rupees		7,918
Revenue Establishment for 6 months :—				
Assistant Commissioner	1	250	Month	1,500
Shekdars	2	50	,,	600
Clerks	3	20	,,	360
Peons	2	8	,,	96
Chainmen	8	8	,,	384
Travelling allowance of above	...	150	,,	900
Furniture and Stationery	Lumpsum	Rupees		600
Total ...	...	...	...	69,842
Contingencies at 5 per cent	...	...	...	3,492
Grand Total Rupees ...	...	..	...	73,334

Rate per mile Rs. 2,704.

Gauge Metre. **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

III—Formation.

Items of work	Quantity in units	Unit	Rate	Cost
			Rs.	Rs.
(a) Earthwork.				
Banks, main line under 10 feet ...	8636·716	1,000 c. ft.	7	60,457
Do 20 ,, ...	5467·094	,,	12	65,604
Do 30 ,, ...	352·346	,,	15	5,285
Earthwork in station yards ...	115·000	,,	20	2,300
Cuttings main line	3622·656	,,	8 to 90	90,110
Top dressing to all banks of selected materials at 10 c.ft. per foot run by ballast train, *i.e.*, 12 miles.	633·600	,,	20	12,672
Channel diversions and roads ...	...	Lumpsum	...	4,500
Service Roads	14·00	Mile.	100	1,400
Lock spitting	27·12	...	30	814
Miscellaneous charges	27·12	...	50	1,356
Maintenance during construction ...	27·12	...	50	1,356
Total ...	...	...	...	2,45,854
Contingencies at 5 per cent	...	...	...	12,292
Total ...		...	...	2,58,146
(d) Side drains.				
Side drains in cuttings—				
Earth 2 × 35,000 × 3½ × 1 = 2,10,000 ...	210·000	1,000 c. ft.	8	1,680
Rock 2 × 3,300 × 1½ × 1 = 9,900 ...	9·900	...	90	891
Catch water drains—				
Earth 38,300 × 3 × 2 = 2,29,800 ...	229·800	...	8	1,838
Total ...	...	...	...	4,409
Contingencies at 5 per cent	...	...	...	221
Total ...	...	...	...	4,630
Grand Total ...	...	...	...	2,62,776

Rate per mile Rs. 9,687.

Abstract quantities of earthwork for bank.

Serial No.	Name of sub-division	Chainage From	Chainage To	Height 0 to 10 ft. rate Rs. 7 per 1,000 c. ft.	Height 0 to 20 ft. rate Rs. 12 per 1,000 c. ft.	Height 0 to 30 ft. rate Rs. 15 per 1,000 c. ft.	Total quantity
				c.ft.	c.ft.	c.ft.	c.ft.
1	Nanjangud Sub-Division 0 to 13 miles inclusive.	0	2,600	62,784	...	...	...
2		2,600	3,200	...	514,500	...	...
3		3,200	6,500	181,871	...	...	...
4		7,300	8,700	202,244	...	...	...
5		8,700	8,900	...	59,772	...	...
6		8,900	12,600	629,306	...	...	...
7		14,400	16,100	182,087	...	...	...
8		18,100	19,700	134,440	...	...	...
9		19,700	20,200	...	149,430	...	...
10		20,200	20,900	82,558	...	...	...
11		22,200	25,800	346,868	...	...	...
12		25,800	26,500	...	256,458	...	...

Gauge metre. NANJANGUD-ERODE RAILWAY Length 27·12 miles

Mysore Section.

NANJANGUD-HARDANHALLI.

Abstract quantities of earthwork for bank—

Serial No.	Name of sub-division	Chainage From	Chainage To	Height 1 ft. to 1 ft. 6 in. Rs. 7 per 1,000 c. ft.	Height 2 ft. to 2 ft. 6 in. Rs. 12 per 1,000 c. ft.	Height 3 ft. to 3 ft. 6 in. Rs. 18 per 1,000 c. ft.	Total quantity
				c. ft.	c. ft.	c. ft.	c. ft.
13	Nanjangud Sub-Division 0 to 13 miles inclusive. *concld.*	26,500	27,200	93,238	...	...	...
14		29,650	30,600	135,477	...	...	...
15		30,600	31,300	...	261,842	...	...
16		31,300	32,100	81,450	...	...	...
17		34,900	38,600	711,259	...	...	...
18		53,600	53,800	...	60,668	...	...
19		53,800	54,700	97,146	...	...	...
20		55,800	57,100	147,420	...	...	...
21		59,200	59,500	1,458	...	...	...
22		59,500	60,400	...	471,725	...	...
23		60,400	62,600	111,444	...	...	...
24		62,600	64,600	144,324	...	...	...
25		64,600	64,900	...	104,922	...	...
26		64,900	65,800	87,552	...	...	...
27		67,300	68,640	137,160	...	...	...
			Total ...	3,718,084	1,879,318	...	...
		Add 10% for settlement ..		371,808	187,931	...	...
		Do repairs ...		371,808	187,931	...	...
			Grand Total	4,461,700	2,255,180	...	6,710,880
28	Chamarajanagar Sub-division 14 to 27·12 miles.	68,640	69,200	11,922	...	...	...
29		70,100	71,300	125,528	...	...	...
30		72,500	72,700	30,876	...	...	...
31		72,700	73,000	...	211,314	...	...
32		73,000	73,300	...	...	293,622	...
33		73,300	73,600	...	122,814	...	...
34		73,600	74,500	217,325	...	...	...
35		74,500	74,800	...	135,462	...	...
36		74,800	77,100	86,024	...	...	...
37		77,100	77,400	...	100,650	...	...
38		77,400	78,900	73,890	...	...	...
39		80,000	80,700	82,558	...	...	...
40		82,700	83,000	28,014	...	...	...
41		83,000	83,300	...	104,922	...	...
42		83,300	84,000	52,402	...	...	...
43		85,500	86,400	94,158	...	...	...
44		87,100	88,400	28,492	...	...	...
45		88,700	90,600	118,890	...	...	...
46		92,600	93,500	160,704	...	...	...
47		93,500	93,800	...	147,000	...	...
48		93,800	94,200	37,352	...	...	...
49		95,500	96,000	45,320	...	...	...
50		96,000	97,100	...	648,494	...	...
51		97,100	97,759	61,537	...	...	...
52		1,00,161	1,00,700	51,820	...	...	...
53		1,00,700	1,01,200	...	182,120	...	...
54		1,01,200	1,05,100	253,908	...	...	...
55		1,05,800	1,07,200	94,332	...	...	...
56		1,07,200	1,07,400	...	60,668	...	...
57		1,07,400	1,11,500	401,725	...	...	...
58		1,12,400	1,13,500	90,882	...	...	...
59		1,13,800	1,15,700	137,446	...	...	...
60		1,16,001	1,24,200	378,658	...	...	...

Gauge Metre. **NANJANGUD-ERODE RAILWAY.** 27 12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

Abstract quantities of earthwork for bank—*concld.*

Serial No.	Name of sub-division	Chainage From	Chainage To	Height 0 to 10 ft. rate Rs. 7 per 1,000 c. ft.	Height 0 to 20 ft. rate Rs. 12 per 1,000 c. ft.	Height 0 to 30 ft. rate Rs. 15 per 1,000 c. ft.	Total quantity
				c. ft.	c. ft.	c. ft.	c. ft.
61	Chamarajanagar Sub-Division 14 to 27 12 miles.—*concld.*	1,24,200	1,25,300	...	411,466	...	...
62		1,25,300	1,25,700	43,000	...	...	...
63		1,26,561	1,27,300	11,085	...	...	...
64		1,29,100	1,29,700	92,628	...	...	...
65		1,29,700	1,31,100	...	551,684	...	...
66		1,31,100	1,43,400	663,704	...	...	...
			Total ...	3,484,180	2,676,594	293,622	...
		Add 10% for settlement...		348,418	267,659	29,362	...
		Do repairs ...		348,418	267,659	29,362	...
		Total for Chamarajanagar Sub-Division.		4,181,016	3,211,912	352,346	1,4446,154
		Grand total for both Sub-Divisions.		8,636,716	5,467,092	352,346	21,157,034

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

Abstract quantities of earth work for cutting.

S. Number	Sub Division	Chainage From	Chainage To	Soft earth	Hard earth	Rocky earth	Rock
				C. ft.	C. ft.	C. ft.	C. ft.
1	Nanjangud Sub-Division, 0-13 miles inclusive	6,500	7,900	19,488	...	...	...
2		12,600	14,400	189,000	...		...
3		16,100	18,100	...	...	[illegible]	...
4		20,900	21,120	...	...	15,015	...
5		21,120	22,200	..	...	77,205	...
6		27,200	27,800	82,534	...	.	...
7		27,800	28,700	153,625	...	...	43,200
8		28,700	29,600	82,426	...	...	...
9		32,100	34,500	238,300	...	...	...
10		54,700	55,500	67,584	...	..	...
11		57,800	58,500	17,833	...		...
12		58,080	59,200	129,427	...	...	...
13		61,000	62,600	...	155,664	.	...
14		65,300	67,800	...	...	247,350	...
	Total for Nanjangud Sub-Di			1,015,267	155,664	575,100	43,200
	Chamarajanagar Sub-Division, 14 to 27·12 miles.	69,200	70,100	...	...	25,838	...
		71,300	72,800	...	...	54,672	...
15		75,200	75,400	..	...	24,192	
16		75,400	76,000	...	...	77,526	57,600
17		76,000	76,600	...	...	52,874	
18		78,900	79,200	..	...	13,245	
19		79,200	80,000	..	...	84,000	...
20		80,700	82,700	..	...	186,600	...
21		84,000	84,450	..	...	16,325	...
22		84,480	85,500	..	...	7,935	...
23		86,400	87,100	..	...	13,167	...
24		88,400	88,700	...	...	7,605	...
25		90,600	91,200	..	...	46,566	...
26		91,200	92,800	...	...	139,054	140,800
27		92,300	92,600	...	...	29,187	...
28		94,200	95,040	...	...	83,200	...
29		95,040	95,500	...	60,720	...	...
30		97,759	98,359	...	...	73,200	...
31		98,359	99,059	...	...	119,063	39,900
32		99,059	100,310	...	...	152,531	...
33		105,100	105,441	7,669	...	...	...
34		105,441	105,800	10,109	...	...	...
35		111,500	112,400	23,625	...	...	...
36		113,500	113,800	15,147	...	...	...
37		115,700	116,001	7,901	...	...	...
38		125,700	126,561	...	...	94,917	...
39		127,000	129,100	...	...	175,122	...
40							
41							
		Total for Chamarajanagar Sub-Division.		64,451	60,720	1,469,954	238,300
		Total for the Section for both Sub-Divisions.		1,079,718	216,384	2,045,054	281,500

Total cuttings 3622·656 units.

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section:

NANJANGUD-HARDANHALLI.

IV. Bridge Work—(a) Minor Bridges.

No.	Mileage	Class of Bridges	Height of bank	Total waterway	Rate per foot run	Cost
						Rs.
343	118·60 of S. I. R. Survey	Five spans of 40' feet girders. (Goondal River.)	25	200	250	50,000

Rate per mile Rs. 1,843.

Rate fixed slightly higher than for a similar bridge on the Mysore-Arsikere Railway.

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** **Length 27·12 miles.**

Mysore Section.

NANJANGUD-HARDANHALLI.

IV. Bridge work—(b) Minor bridges costing under Rs. 5,000.

Serial No.	Mileage	Description of bridge	Waterway in feet	Cost at Rs. 260 per R. ft.
				Rs.
1	92·39	1— 3 feet rail top	3	780
2	92·47	Do	3	780
3	92·55	1—18 inches pipe drain	1½	390
4	92·64	Do	1½	390
5	92·73	1— 3 feet rail top	3	780
6	93·28	1—18 inches pipe drain	1½	390
7	93·39	Do	1½	390
8	93·46	1— 3 feet rail top	3	780
9	93·61	1—18 inches pipe drain	1½	390
10	93·70	Do	1½	390
11	93·86	Do	1½	390
12	94·19	1— 3 feet arch	3	780
13	94·33	1—10 ,, do	10	2,600
14	94·67	1— 3 feet rail top	3	780
15	95·44	1—4½ ,, slab culvert	4½	1,170
16	95·60	1— 6 ,, arch	6	1,560
17	95·98	1— 6 ,, rail girder	6	1,560
18	96·33	1—18 inches pipe drain	1½	390
19	96·33	Do	1½	390
20	96·87	Do	1½	390
21	96·88	1— 3 feet slab culvert	3	780
22	97·30	1—4½ ,, do	4½	1,170
23	97·71	1— 3 feet slab culvert	3	780
24	98·08	1— 3 ,, arch	3	780
25	98·33	1—12 ,, girder	12	8,120
26	98·82	1— 3 ,, arch	3	780
27	99·01	1— 3 ,, rail top	3	780
28	99·55	1— 6 ,, arch	6	1,560
29	101·41	1— 6 ,, do	6	1,560
30	101·53	1— 6 ,, do	6	1,560
31	102·06	1—10 ,, do	10	2,600
32	102·18	1— 3 ,, slab culvert	3	780
33	102·43	2— 3 ,, do	6	1,560
34	102·84	1— 6 ,, arch	6	1,560
35	103·35	1— 6 ,, do	6	1,560
36	103·82	1— 3 ,, rail top	3	780
37	103·91	1— 3 ,, slab culvert	3	780
38	104·23	1—4½ ,, slab culvert in station yards...	4½	1,170
39	104·87	2— 6 ,, arch	12	3,120
40	105·00	1— 6 feet arch	6	1,560
41	105·34	1—10 ,, do	10	2,600
42	106·07	1—18 inches pipe drain	1½	390
43	106·25	1— 6 feet arch	6	1,560
44	106·39	1— 3 ,, rail top	3	780
45	106·86	1—10 ,, arch	10	2,600
46	107·14	1— 6 ,, do	6	1,560
47	107·65	1— 6 ,, do	6	1,560
48	107·80	1—12 ,, do	12	3,120
49	108·27	1—12 ,, girder	12	3,120
50	108·44	1—6 feet arch	6	1,560
51	108·98	Do	6	1,560
52	109·20	1—4½ feet slab culvert	4½	1,170
53	109·35	1—3 ,, Rail top	3	780
54	109·61	1—3 ,, do	3	780
55	110·14	1—10 ,, Arch	10	2,600
56	110·80	1—3 ,, Slab culvert	3	780
57	111·22	2—3 do	6	1,560
58	112·38	1—3 ,, Rail top	3	780
59	113·29	1—6 ,, Arch	6	1,560
60	114·31	1—12 ,, Girder	12	3,120
61	114·84	1—18 inches Pipe drain	1½	390

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles

Mysore Section.

NANJANGUD-HARDANHALLI.

V. Fencing.

Description	Quantity	Rate	Per	Amount
		Rs.		Rs.
(a) Fencing.				
Wire fencing	...	...	...	500
Boundary stones	1,325	1	Each	1,325
Total ...	...	...	...	1,825
Contingencies at 5 per cent ...	...	...	...	91
Total ...	...	...	...	1,916
(b) Road crossings.				
Level crossing 2nd Class in low banks ...	6	816	Each	4,896
... do 3rd do with gate lodge ...	2	350	,,	700
do do in low banks ...	29	135	,,	3,915
do do in high banks ...	3	200	,,	600
Foot-path	50	6	,,	300
Total ...	...	...	...	10,411
Contingencies at 5 per cent ...	...	...	...	521
Total ...	...	...	...	10,952
(c) Mile & Gradient Posts.				
Mile posts	27	10	Each	270
Gradient posts	76	15	,,	1,140
Total ...	...	...	...	1,410
Contingencies at 5 per cent ...	...	...	...	70
Total ...	...	...	...	1,480
Grand Total Rupees ...	...	...	...	14,328

Rate per Mile Rs. 528.

(*a*) Rate per mile Rs. 70; (*b*) Rate per mile Rs. 403; (*c*) Rate per mile Rs. 55; Rs. 528.

Gauge Metre. **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

Estimated cost of one mile of Permanent way with 50 lbs. Rails.

Particulars	Weight in tons or quantity	Rate	Per	Cost
		Rs. a. p.		Rs.
Rails, steel, flat footed 50 lbs. B. S. S. 30 feet long.	78·57	150 0 0	Ton.	11,786
Fist plates, steel, notched for coach screws weight of one pair 23·2 lbs.	3·076	180 0 0	,,	554
Fist bolts and nuts weight ·906 lbs.	0·485	1,600 0 0	,,	776
Screw spikes (4 a joint sleepers, 2 at all others) weight of each ·73 lbs.	1·483	1,200 0 0	,,	1,780
Dog spikes (4 at joint sleepers, 2 at all others) weight of each ·6 lbs.	1·219	1,200 0 0	,,	1,463
Railway freight on iron work from Kalimati to Nanjangud (1,365 miles.)	84·833	22 0 0	,,	1,866
Unloading the above and stacking at Nanjangud station.	,,	0 8 0	,,	42
Loading rails etc., into material train ...	,,	0 10 0	,,	53
Carriage of rails etc., by train average 14 miles.	,,	0 6 0	,,	32
Cost of sleepers, Mysore teak 1,936 delivered at Nanjangud.	1,936	6 4 0	Each.	12,100
Bridge sleepers 5 per mile.	5	8 0 0	,,	40
Unloading sleepers at Nanjangud and stacking (70 tons per mile.)	70	0 10 0	Ton.	44
Loading sleepers into material train ...	70	0 4 0	,,	18
Carriage of sleepers by train average length 15 miles.	70	0 6 0	,,	26
Laying charges	1	500 0 0	Mile.	500
Maintenance during construction and 6 months after opening.	1	600 0 0	,,	600
Total ...	...	...	...	31,680
Contingencies on everything excepting cost of sleepers.	...	...	...	979
Grand Total ...	...	...	...	32,659

41½ th work = 65 Cu @ Rs 100 = Rs 6,500/-

- for M.Ts mean Rs 100/-

Can be received = Rs 25000 by using 2 Nos of ¼ th material

32,659
25000
Rs 7,659

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

VIII. Stations and Buildings. (*a*) Stations and Offices.

Particulars	0 Nanjangud Town W. G.		7·33 Badanval Flag		14·99 Badanguppe III Class		22·12 Chamaraja-nagar II Class W. G.		27·12 Hardan-halli Terminal	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost
		Rs.		Rs.		Rs.		Rs.		Rs.
Station building II Class with Waiting Room and III Class Waiting shed.	...	...	...	...	...	...	1	12,000	....	....
Station building III Class with Waiting Room.	...	...	...	...	1	3,500	...	...	....	....
Flag Station Building ...	...	...	1	1,000	...	...	....	...	1	1,000
Passenger platform ...	...	...	1	500	1	1,500	1	1,500	1	500
Goods platform 2 ft. 3 in. above rail level 300 feet long,	...	...	...	...	...	...	1	600	....	....
Goods shed	...	...	....	...	...	...	1	3,000	...	...
Platform latrines ...	...	...	1	750	1	750	1	750	1	750
Passenger approach roads ...	...	...	1	300	1	300	1	500	1	300
Goods approach roads ...	...	....	...	...	...	...	1	200	...	...
Station hydrant and piping ...	...	...	...	...	...	...	1	400	....	....
Station name boards ...	...	...	2	150	2	150	2	150	2	150
Lamps for platforms ...	...	...	4	200	4	200	6	300	4	200
Total ...	...	...	...	2,900	...	6,400	...	19,400	...	2,900
Contingencies at 5 per cent ...	...	...	...	145	...	320	...	970	...	145
Grand Total ...	...	...	...	3,045	...	6,720	...	20,370	...	3,045

Rate per mile Rs. 1,224.

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

VIII. Station and Buildings (*d*) Station Machinery.

Particulars	0 Nanjangud Town W. G.		7·33 Badanval Flag		14·99 Badanguppe III Class		22·12 Chamaraja-nagar II Class W. G.		27·12 Hardan-halli Terminal	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost
		Rs.		Rs.		Rs.		Rs.		Rs.
Ashpit 50 feet	...	...	...	...	...	...	1	1,250	...	...
Well 16' diameter	...	...	...	...	...	...	1	3,000	...	...
Hand pump with shed	...	...	...	...	...	...	1	1,200	...	...
Cast iron pipes	...	...	...	...	...	...	1	3,600	...	...
Water tank and trestles	...	...	...	...	...	...	1	2,500	...	...
Water columns 6"	...	...	...	...	...	...	2	1,000	...	...
Platform weighing machine	...	...	1	250	1	250	1	250	1	250
Goods weighing machine	...	...	...	...	...	...	1	300	...	...
Scotch block	...	...	...	...	1	20	1	20	...	...
Buffer stops	...	...	...	...	2	100	2	100	...	...
Signals	...	...	2	3,500	2	3,500	2	3,500	1	1,750
Turn table	...	...	...	...	...	...	1	8,000	...	...
Well for staff	...	...	...	...	1	3,000	...	...	...	...
Total	...	...	...	3,750	...	6,870	...	24,720	...	3,750
Contingencies at 5 per cent	...	...	...	188	...	344	...	1,236	...	188
Total	...	...	...	3,938	...	7,214	...	25,950	..	3,938
Grand Total Rs.	...	...	...	...	...	41,046	...	...	...	...

Rate per mile Rs. 1,513.

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

XI. Rolling Stock.

Sub-head	Number of miles	Rate per mile	Amount
		Rs.	Rs.
(*a*) Locomotive	27·12	12,000	3,25,440
(*b*) Carriage and Wagon			
(*c*) Motors	...	...	...
Total ...	...	...	3,25,440

Rate per mile Rs. 12,000.

Gauge-Metre NANJANGUD-ERODE RAILWAY. Length 27·12 miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

XII General Charges.

Sub-heads	Per	Rate	Quantity	Cost
		Rs.		Rs.
(*a*) Direction and General ...	Mile	36[illegible]	27·12	9,983
(*b*) Engineering ...	,,	2,6[illegible]	27·12	72,880
(*c*) Stores ...	,,	27[illegible]	27·12	7,312
(*d*) Audit and Accounts ...	,,	1[illegible]	27·12	4,092
(*e*) Medical and Sanitation ...	,,	1[illegible]	27·12	5,040
(*f*) Locomotive ...	...	...	...	...
(*g*) Traffic ...	...	...	...	...
Total ...	...	...	...	1,00,207

Rate per mile Rs. 3,695.

Particulars	No.	Rate	Period	Cost	Total
		Rs.	Months	Rs.	Rs.
(a) Direction and General					
Share of Superintending Engineer's establishment ½% of cost of railway		...	Approximately		9,983
(b) Engineering.					
Executive Engineer (Division) ...	1	600	24	14,4[illegible]	...
Head Clerk do ...	1	50	24	1,2[illegible]	...
Deputy Clerk do ...	1	25	24		...
Accountant do ...	1	100	24	[illegible]	...
Assistant Accountant do ...	1	40	24	[illegible]	...
Record-keeper do ...	1	25	24	600	...
Store-keeper do ...	1	30	24	720	...
Cashier do ...	1	50	24	1,20[illegible]	...
Draughtsman do ...	1	50	24	1,200	...
Assistant Draughtsman do ...	1	25	24	600	...
Peons do ...	6	10	24	1,440	...
Assistant Engineers for two Sub-Divisions...	2	200	24	9[illegible]	...
Overseers do ...	2	100	24	[illegible]	...
Sub-Overseers for Sub-Divisions do ...	2	50	24	[illegible]	...
Maistries do ...	4	25	24	2,400	...
Sub-Division Clerks do ...	2	25	24	1,200	...
Peons do ...	4	10	24	960	...
Travelling allowances	...	300	24	7,200	...
Office furniture	...	lumpsum rupees		1,000	...
Quarters temporary	...	...	...	...	...
Executive Engineer 1 × 2,000 = 2,000					
Assistant Engineer 2 × 1,500 = 3,000					
Head Clerk Accountant, Cashier and Draughtsman 4 × 750 = 3,000		As per detail in margin		16,000	...
Overseers ... 2 × 750 = 1,500					
Officials and Maistries 11 × 500 = 5,500					
Peons ... 10 × 100 = 1,000					
16,000					
Office accommodation	...	lumpsum	rupees	1,000	...
Unforeseen charges such as office contingencies, etc.	...	,,	,,	1,000	...
Total ...	...	...	...	...	72,880

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** **Length 27·12 miles.**

Mysore Section.

NANJANGUD-HARDANHALLI.

XII. General Charges.—*concld.*

Particulars	No.	Rate	Period	Cost	Total
		Rs.	Months	Rs.	Rs.
(c) Stores.					
Shares of Chief Store-keeper's establishment ¼% of cost of railway	...	...	...	4,992	...
Store Clerk	1	35	24	840	...
Menials	2	10	24	480	...
Quarters and Office Building	...	lumpsum	rupees	1,000	...
Total ...	...	...	...	...	7,312
(d) Audit and Accounts.					
Share of Comptroller's establishment ¼% of cost of railway.	...	...	...	...	4,992
(e) Medical and Sanitation.					
Sub-Assistant Surgeon	1	50	24	1,200	...
Compounder	1	15	24	360	...
Menials	2	10	24	480	...
Travelling allowances	...	lumpsum	rupees	500	...
Quarters and buildings	...	,,	,,	1,000	...
Instrument (depreciation)	...	,,	,,	500	...
Medicine	...	,,	,,	1,000	...
Total	...	...	...	...	5,040
(f) Loco.	...	...	...	...	...
(g) Traffic.	...	...	...	...	...
Grand Total	...	...	...	...	1,00,207

Rate per mile Rs. 3,695.

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Lengh 27·12 Miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

Form R. II.—Gradient Abstract.

Inclination	Number of each	Total length in miles	Percentage of total length of line
1 in 100 or 1 per cent	30	16·62	61·28
1 in 151 to 1 in 200 or 0·5 per cent	2	1·22	4·49
1 in 201 to 1 in 300 or 0·33 per cent	3	1·21	4·46
1 in 301 to 1 in 500 or 0·2 per cent	3	0·94	3·47
1 in 501 to 1 in 1000 or 0·1 per cent	6	2·99	11·03
Flatter than 1 in 1000 including Levels	31	4·14	15·27
Total	75	27·12	100·00

NOTE.—This abstract will be subject to alteration of the alignment during construction.

NAN. ERO. RYS.

NANJANGUD-ERODE RAILWAY.

Mysore Section.

Guage Metre. NANJANGUD-HARDANHALLI. **Length 27·12 Miles.**

Form R IV. Important Bridges.

Name of river	Mileage	Drainage area	Rise of ordinary flood above low water	Slope of bed per mile	Mean velocity in flood per second	Sectional area in flood	Discharge per second	Span		Height of underside of girders		Average depth of founds
										Above low water	Above flood level	
1	2	3	4	5	6	7	8	9		10	11	12
		Sq. miles	Feet	Feet	Feet	Sq. Feet	C. Feet	Feet	No.	Feet	Feet	Feet
Goondal ...	118·60	860·60	16	5·28	6·56	3,940	25,846	40	5	21	5	5 (Open founds)

About half of the area drained by the Goondal river is under cultivation. The remainder is either waste rocky ground or forest land. The average rainfall is 35 inches. A large percentage of the drainage is stored up in tanks. The Arasinkere tank alone has a waterspread of about 2½ square miles. The soil is chiefly stony.

Gauge-Metre

NANJANGUD-ERODE RAILWAY

Length 27·12 Miles.

Mysore Section.

NANJANGUD-HARDANHALLI.

Form R. VI. Station Machinery.

Name of Station	Station ashpits	Water Column		Pipes		Water tank capacity	Well diameter in feet	Steam pump with shed	Hand pump or water lift	Home signals	Distant signals	Weigh Bridge		Engine shed area	Loco ashpits	Engine turn table	Engine lift
		Number	Diameter in inches	Length	Diameter in inches							Number	Capacity				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Nanjangud Town ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Badanval ...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...
Badanguppe ...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...
Chamarajanagar ...	1	2	6	99 729 81	6 4 3	8,000	16	...	1	...	2	...	...	...	1	1	...
Hardanhalli ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...

NANJANGUD-ERODE RAILWAY.

MYSORE SECTION.

HARDANHALLI-MYSORE FRONTIER.

LENGTH 5·99 MILES.

ABSTRACT AND DETAILED ESTIMATES.

Gauge Metre. **NANJANGUD-ERODE RAILWAY.** Length 5·99 Miles.

Mysore Section.

HARDANHALLI-FRONTIER.

Abstract of Cost.

No.	Heads of Account	Sub-head		Main-head	
		Amount	Rate per mile	Amount	Rate per mile
		Rs.	Rs.	Rs.	Rs.
I	**Preliminary Expenses** ...	...	...	7,571	1,264
	(a) Survey expenses ...				
	(b) Plant	7,571	1,264	...	....
	(c) Establishment				
II	**Land**	...	...	3,728	622
III	**Formation**	...	...	94,569	15,788
	(a) Earthwork	92,902	15,510	...	...
	(b) Tunnels	...	...	...	...
	(c) Walling	...	...	...	...
	(d) Side and catch water drains ...	1,667	278	...	...
IV	**Bridge Work**	...	...	63,680	10,631
	(a) Major Bridges	36,000	6,010	...	...
	(b) Minor Bridges	27,680	4,621	...	...
V	**Fencing, etc.**				
	(a) Fencings	...	...	1,875	313
	(b) Road crossings	1,560	260	...	...
	(c) Mile and Gradient Posts ...	315	53	...	...
VI	**Electric Telegraph**	...	...	...	...
VII	**Ballast and Permanent Way** ...	...	...	2,07,248	34,599
	(a) Main line { i. Permanent way	1,95,627	32,659	...	...
	ii. Ballast ...	11,621	1,940	...	...
	(b) Sidings { i. Permanent way	...	...	...	...
	ii. Ballast ...	...	...	...	...
	(c) Points and crossings ...	...	...	...	...
VIII	**Stations and Buildings** ...	...	...	...	...
	(a) Stations and Offices ...	...	...	...	...
	(b) Workshops, etc.	...	...	...	...
	(c) Staff quarters	...	...	...	...
	(d) Station Machinery ...	...	...	...	...
IX	**Plant**	...	...	3,894	650
	(a) Engineering	899	150	...	...
	(b) Construction	2,396	400	...	...
	(c) Loco	...	...	...	...
	(d) Carriage and Wagon ...	...	...	...	...
	(e) Station and Office furniture ...	599	100	...	...
X	**Ferries**	...	...	...	...
XI	**Rolling Stock**	...	...	71,880	12,000
	(a) Locomotive				
	(b) Carriage and Wagon ...	71,880	12,000	...	...
	(c) Motors	...	...	...	...
XII	**General Charges**	...	...	11,192	1,868
	(a) Direction	2,166	361	...	...
	(b) Engineering	4,140	691	...	...
	(c) Stores	1,083	181	...	...
	(d) Audit and Account ...	1,083	181	...	...
	(e) Medical and Sanitation ...	2,720	454	...	...
	(f) Locomotive	...	...	...	...
	(g) Traffic	...	...	...	...
	Grand Total ...	...	...	4,65,637	77,735

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Length 5·99 Miles.

Mysore Section.

HARDANHALLI-FRONTIER.

II. Land.

Description	Quantity	Rate	Per	Amount
Chamarajanagar.		Rs.		Rs.
Dry cultivation inferior	32·00	50	Acre	1,600
Village or unreserved forest	64·00	10		640
Compensation for wells and trees	Lump sum rupees.			100
Demarcating survey field	5·99	35	Mile	210
Revenue establishment for land acquisition, etc.	Lump sum rupees.			1,000
Total				3,550
Contingencies at 5 per cent				178
Total				3,728

Rate per mile Rs. 622/-

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** Length 5·99 Miles.

Mysore Section.

HARDANHALLI-FRONTIER

Abstract quantities of earthwork for bank.

S. No.	Chainage From	Chainage To	Height 0 to 10 ft. Rate Rs. 7 per 1,000 c.ft.	Height 0 to 20 ft. Rate Rs. 12 per 1,000 c.ft.	Height 0 to 30 ft. Rate Rs. 15 per 1,000 c.ft.
			C. Ft.	C. Ft.	C. Ft.
1	1,44,900	1,47,200	2,08,472		....
2	1,47,900	1,49,200	1,59,094	....	....
3	1,50,400	1,53,800	2,93,770	....	....
4	1,53,800	1,54,500	.....	2,38,154	....
5	1,54,500	1,55,000	58,970		
6	1,56,400	1,57,200	1,28,912		
7	1,57,500	1,57,700	11,564	....	....
8	1,57,700	1,58,000	.....	1,15,200	....
9	1,58,000	1,58,241	10,180		....
10	1,58,500	1,58,900	25,016		....
11	1,59,600	1,59,900	24,786	....	....
12	1,59,900	1,60,100	....	98,000	....
13	1,60,100	1,60,500	45,334		....
14	1,60,900	1,61,600	21,042		....
15	1,62,400	1,62,500	23,134		....
16	1,62,500	1,63,300	....	4,01,008	....
17	1,63,300	1,63,521	17,680		....
18	1,64,900	1,65,000	8,262	....	....
19	1,65,000	1,65,300	....	2,21,400	....
20	1,65,300	1,65,400	6,984	....	....
21	1,66,200	1,66,500	33,126	....	....
22	1,66,500	1,66,700	.....	....	2,52,188
23	1,66,700	1,66,800	....	1,454	....
24	1,66,800	1,67,000	31,568	....	....
25	1,68,000	1,68,200	19,228	....	....
26	1,68,200	1,68,500	....	2,13,312	....
27	1,68,500	1,68,700	6,012	....	....
28	1,68,700	1,69,100	....	1,56,270	....
29	1,69,100	1,69,300	18,676	....	....
30	1,70,200	1,70,400	30,876	....	....
31	1,70,400	1,70,600	....	1,03,676	....
32	1,70,600	1,70,800	....	....	2,10,012
33	1,70,800	1,71,000	.....	1,14,268	....
34	1,71,000	1,71,300	33,126	....	....
35	1,72,200	1,73,700	1,70,040	....	....
	Total	....	13,85,852	17,02,742	4,62,200
	Add for settlement 10%		1,38,585	1,70,274	46,220
	,, for repairs 10%		1,38,585	1,70,274	46,220
	Grand total		16,63,022	20,43,290	5,54,640

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Length 3·99 Miles.

Mysore Section.

HARDANHALLI-FRONTIER,

IV. Bridge work.—(a) Major Bridges.

No.	Mileage	Class of bridge	Height of bank	Total waterway	Rate per foot run	Cost
247	87·58 S. I. R. Survey	3 spans of 40 feet Girders Joghatti Halla (2nd crossing)	30·5	120	300	36,000

Rate per mile Rs. 6,000.

Rates fixed after comparison with actuals on the Mysore-Arsikere Railway for a similar bridge.

Gauge-Metre **NANJANGUD-ERODE RAILWAY.** Lenght 5·99 Miles.

Mysore Section

HARDANHALLI-FRONTIER.

IV. Bridge work—(b) Minor bridges costing below Rs. 5,000.

Serial No.	Mileage	Description of bridge	Waterway in feet	Cost at Rs. *260 per R. foot
1	86·44	1—6 feet arch	6	1,560
2	86·81	1—3 feet arch	3	780
3	87·23	1—3 feet arch	3	780
4	87·61	1—12 feet arch	12	3,120
5	88·26	1—10 feet arch	10	2,600
6	88·59	1—3′ Rail top	3	780
7	88·82	1—6′ arch	6	1,560
8	89·23	1—3′ arch	3	780
9	89·47	1—3′ arch	3	780
10	89·91	1—3′ arch	3	780
11	90·24	1—12′ girder	12	3,120
12	90·37	1—3 feet slab culvert	3	780
13	90·96	1—3 feet arch	3	780
14	91·43	1—3 feet arch	3	780
		Total	73	18,980

Same average rate as on M. A. Railway. See note on rates.

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** **Length 5·99 Miles.**

Mysore Section.

HARDANHALLI-FRONTIER.

VII. Ballast and Permanent Way.

Particulars	Quantity	Unit	Rate	Cost	Rate per mile
(*a*) Main line—			Rs.	Rs.	Rs.
i. Permanent way—					
50 lbs. B.S. Section, F.F. rails, steel, on Mysore teak sleepers.	5·99	Mile	32,659	1,95,627	
ii. Broken Stone Ballast at 10 cubic feet per foot run	5·99		1,940	11,621	
Total				2,07,248	
(*b*) and (*c*)		Nil			
Grand Total				2,07,248	34,599

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Length 5·99 Miles.

Mysore Section.

HARDANHALLI-FRONTIER

XI Rolling stock.

Sub-head	Number of miles	Rate per mile	Amount
		Rs.	Rs.
(*a*) Locomotive (*b*) Carriage and Wagon (*c*) Motors	5·99	12,000	71,880

Rate per mile Rs. 12,000.

XII. General charges for one Sub-Division.

Duration 12 Months. **Length 5·99 Miles.**

Particulars	No.	Rate	Period	Cost	Total
		Rs.		Rs.	Rs.
(a) Direction and General— Share of Superintending Engineer's Establishment ½% of cost of Railway.			approximate		2,166
(b) Engineering—					
Overseer	1	100	12	1,200	
Maistry	1	25	12	300	
Peons	2	10	12	240	
Travelling Allowances		lumpsum	rupees	500	
Office furniture		lumpsum	rupees	200	
Quarters temporary Overseer 1×750=750 Maistry 1×500=500 Peons 2×100=200 — 1450		lumpsum	rupees	1,450	
Office accommodation		lumpsum	rupees	200	
Unforeseen charges such as office contingencies, etc.		lumpsum	rupees	50	
Total					4,140
(c) Stores— Share of Chief Store-Keeper's Establishment ¼% of cost of Railway.					1,083
(d) Audit and Accounts— Share of Comptroller's office Establishment ¼% of cost of Railway.					1,083
(e) Medical and Sanitation—					
Sub-Assistant Surgeon	1	50	12	600	
Compounder	1	15	12	180	
Menials	2	10	12	240	
Travelling Allowances		lumpsum	rupees	200	
Quarters and Buildings		lumpsum	rupees	1,000	
Instrument (depreciation)....		lumpsum	rupees	200	
Medicine		lumpsum	rupees	300	
Total					2,720
(f) Loco—		Nil			
(g) Traffic—		,,			
Grand Total					11,192

Rate per mile Rs. 1,868.

Gauge-Metre. **NANJANGUD-ERODE RAILWAY.** Length 5·99 Miles.

Mysore Section.

HARDANHALLI-FRONTIER.

From R. II.—Gradient Abstract.

Inclination	Number of each	Total length in miles	Percentage of total length of line
1 in 100 or 1 %	2	3·77	62·94
1 in 101 to 1 in 150 or 0·66%	6	1·24	20·70
1 in 301 to 1 in 500 or 0·2%	1	·31	5·17
1 in 501 to 1 in 1,000 or 0·1%	1	·12	2·00
Flatter than 1 in 1,000 including Level	7	·55	9·19
Total	17	5·99	100·00

[NOTE—This abstract will be subject to alterations to be made during construction.]

NAN. ERO. RYS.

NANJANGUD-ERODE RAILWAY.

Mysore Section.

Note on Rates for 1919 Project.

1. *Preliminary Expenses.*—The actual cost of the 1898 and 1909—11 surveys have been taken together with Rs. 200 per mile for staking out the line.

2. *Land.*—Full explanation has been given in para 26 of the Report.

3. *Formation.*—See remarks in para 27 of the Report. The earthwork is very light. All banks are in soft soil and the minimum rate for low banks of under 10 feet is Rs. 7. Banks of under 20 and 30 feet are estimated at Rs. 12 and Rs. 15 respectively inclusive—that is to say the rate applies to the whole bank from bottom to top. The number of high banks is however very small.

The minimum rate for cuttings in soft soil is Rs. 8, hard earth being estimated at Rs. 12, soft rock at Rs. 25 and hard rock at Rs. 60. Side drains and station yards are estimated on the same scale. The top dressing to banks is estimated at Rs. 20 per 1,000 cubic feet which is reasonable. Other items call for no special remarks. Miscellaneous charges and establishment charges are provided at Rs. 100 and Rs. 200 per mile respectively. The rates are higher than on the Mysore-Arsikere Railway and higher than now paid in the Nanjangud and Chamarajnagar Taluks by the Public Works Department—schedules of which are attached.

4. *Bridge Work.*—The two major bridges are estimated at Rs. 250 and 300 per lineal foot of opening judging by comparison with similar structures on the Mysore-Arsikere Railway. On the latter work there was keen competition with other large public works and hence the rates were high. Now that the cost of labour has risen, the rates are likely to remain high. Cost of Girders will be more and masonry less than on Mysore-Arsikere Railway; so roughly speaking the cost per foot may be the same. The cost of minor bridges has also been estimated at the same average rate as actually spent on the Mysore-Arsikere Railway. Detailed estimates of several bridges on the Mysore-Arsikere Railway are attached for information. The Lump Sum provisions in this estimate have been determined after comparing the types provided with similar types on the Mysore-Arsikere Railway.

5. *Fencing.*—No further remarks are needed other than those in para 29 of the Report.

6. *Ballast and Permanent Way.*—The price of rails has been calculated from the rate quoted by Messrs. Tatas and communicated by the Railway Board. (Copy attached.) The rates for the fastenings are based on present market rates. Mysore teak sleepers are estimated at Rs. 6-4-0 each. This is the price quoted by the Conservator of Forest whose letter is attached. The cost of recovering sleepers from the Mysore Forests cannot be much more now than formerly and as the rate for the Mysore-Arsikere Railway was Rs. 3-9-0 per sleeper the rates now demanded seems exorbitant.

Broken stone ballast can be had in abundance in many places and the rate of Rs. 3 per 100 cubic feet is considered ample in comparison with what was paid on the Mysore-Arsikere Railway, which amounted to less than Rs. 3 on the whole.

7. *Stations and Buildings.*—As there are only two Flag Stations, one III Class and one II Class Station the requirements are very small. No further remarks than those made in para 34 of the Report on the lumpsum provision are needed.

8. *Plant.*—See para 35 of the Report.

9. *Rolling Stock.*—An accurate estimate of the number of vehicles required and of the cost of each is not possible for the present. A lumpsum of Rs. 12,000 per mile has however been made which will allow of the purchase of sufficient stock to run one train to Chamarajnagar and back daily with some

spare Goods vehicles. This provision is liable to change when the actual requirements are determined by the Traffic Manager, Carr. and Wagon Superintendent and Loco Superintendent.

10. *General charges.*—The usual provisions of ½ per cent for Direction and ¼ per cent each for Stores and Audit and Accounts of the total cost of the project has been made. As regards the pay of the individual member of the proposed staff no remarks are needed. The period of 24 months allowed for the Nanjangud-Haradanhalli Section and 12 months for the Frontier Section should be ample considering the lightness of the earthwork and the absence of big bridges.

H. D. RICE,
Superintending Engineer
Mysore Railway Surveys.

1st March 1919.

Copy of letter No. 196—AC. dated 13/17th March 1919, from the Conservator of Forests in Mysore, Bangalore, to the superintending Engineer, Mysore Railway Surveys, Bangalore.

With reference to your letter No. 2196/29, dated the 8th February last, I have the honor to state that I will be able to supply teak metre gauge sleepers (6″ × 8″ × 4½″) at Rs. 6 and Jungle at Rs. 3 per sleeper delivery being given either at Nanjangud or Chamarajnagar.

Copy of letter No. 484-S/17, dated 4th October 17, from the Secretary, Railway Board, Simla, to the Agent, Mysore State Railways.

In continuation of this office circular No. 484-S/17, dated 11th September 1917, I am directed to forward herewith a copy of the schedule of prices fixed by the Indian Munitions Board for rails, fishplates and steel sections supplied to railways by Messrs The Tata Iron and Steel Company, Ltd. during 1917-18.

	Price at Kalimatti
Rails	
[illegible] Section and upwards	Rs. 150 per Ton
Fish plates :-	
All sections	Rs. 180.

Actual Cost of Construction of Major Bridges on Mysore-Arsikere Railway.

Abstract Cost of some Type Bridges

No.	Chainage on M. A. Ry.	Description of Bridge	Waterway	Height of formation	Cost	Rate per R. Ft.
				Ft.	Rs.	Rs.
1	21,600	2×2[illegible]×8' Arched culvert	40	24	16,409	410
2	24,700	1×15'×5'	15	21	7,354	490
3	35,075	2×2[illegible]×8'	40	40	32,888	822
4	52,962	2×12'×4'	24	24	[illegible],469	436
5	65,050	2×2[illegible]×8'	40	22	13,[illegible]7	333
6	1,18,200	2×2[illegible] Girder Bridge	40	15	9,5[illegible]6	237
7	1,64,800	5×2[illegible]	100	13	12,515	125
8	1,87,000	1×2[illegible]	20	22	8,0[illegible]4	434
9	2,50,700	3×2[illegible]	60	10	8,6[illegible]6	144

Abstract of Minor Bridges on Mysore-Arsikere Railway.

No.	Description	Waterway	Cost	Rate per Running Foot
		L. Ft.	Rs.	Rs.
105	Small Girder Bridges, Arches, Flat tops, Open tops, Syphons and Pipe drains....	689	1,76,956 say	257 or Rs. 260

NOTE—For details see Mysore-Arsikere Railway Estimates.

Schedule of Rates from Mysore-Arsikere Railway Estimate.

III. Formation—(a) Earthwork.

Description of work	Per	Rate Rs.	A.	P.
Earthwork in Bank—	Cft.			
Soft earth	1000	4	8	0
Hard earth		5	0	0
Lead bank		6	0	0
Gravel		6	4	0
Disintegrated soft rock		8	0	0
Do		10	0	0
Do		10	8	0
Do		11	0	0
Do		12	0	0
Forming bank in 1st mile		15	0	0
Soft rock removed by jumpers		19	4	0
Do do wedges		25	0	0
Earthwork cutting—				
Soft earth		4	8	0
Filling in rough stones		5	12	0
Hard earth		7	0	0
Gravel		8	12	0
Disintegrated soft rock		13	0	0
Soft rock removed by jumpers		19	0	0
Hard rock removed by jumpers		20	0	0
Soft rock removed by wedges		25	2	0
Do		26	0	0
Hard rock removed by wedges		34	8	0
Do		38	8	0
Through rate rock		50	8	0
Blasting by powder		59	0	0
Do by dynamite		68	0	0
Do do		70 to 110		

Schedule of Rates received from the Executive Engineer, Mysore Division.

Description of work	Per	Rate Rs.	A.	P.
NANJANGUD TALUK.				
Roads.				
Earthwork ordinary soil	c. yd.	0	2	6 to
		0	3	0
Do gravelly soil	,,	0	3	6 to
		0	4	0
Soft rock cutting	,,	0	6	0
Hard do	,,	1	0	0
Blasting rock	,,	3	0	0
New stonework	,,	2	12	0
Rough stone in chunam	c. ft.	0	4	0
Burnt stone in chunam	,,	0	6	0
Plastering with mortar	sqr.	2	12	0
Burnt stone slabs, 9" thick	s. ft.	0	[illegible]	[illegible]
Concrete with surki mortar	c. ft.	[illegible]	4	
Pointing with chunam	sqr.	[illegible]	[illegible]	
		2		
Bridge and Buildings, etc.				
Earthwork excavation ordinary soil	c. yd.	[illegible]	4	[illegible]
Do gravelly soil	,,	0	5	0
Rough stone in mortar	c. ft.	0	4	0
Burnt stone in mortar	,,	0	6	0
Plastering with chunam	sqr.	3	0	0
Teak wood work wrought and put up	c. ft.	5	0	0
Honne wood do	,,	3	12	[illegible]
Jungle wood do	,,	[illegible]	[illegible]	[illegible]
CHAMARAJNAGAR TALUK.				
Roads.				
Earthwork ordinary soil	c. yd.	0	2	6
Do gravelly soil	,,	0	4	0
Soft rock cutting	,,	0	6	0
Hard do	,,	1	0	0
Blasting rock	,,	3	0	0
New stone work	,,	2	12	0
Rough stone in chunam	c. ft.	0	4	0
Burnt stone in chunam	,,	0	6	6
Plastering with mortar	sqr.	2	4	0
Burnt stone slabs. 9" thick	s. ft.	0	12	0
Concrete with surki mortar	c. ft.	0	3	0
Pointing with chunam	sqr.	2	0	0
Buildings, etc.				
Earthwork excavation ordinary soil	c. yd.	0	2	6
Do gravelly soil	,,	0	3	0
Rough stone in mortar	c. ft.	0	3	6
Burnt stone in mortar	,,	0	4	6
Plastering with chunam	sqr.	3	0	0
Teak wood work wrought and put up	c. ft.	4	0	0
Honne wood do	,,	3	0	0
Jungle wood do	,,	2	0	0

APPENDIX I.

Letter No. 969 of 29th September 1899, from the Acting Agent, South Indian Railway, to the Consulting Engineer, Madras.

With reference to the sanction accorded in Government of India Letter No. 78 R. C., dated 15th January 1898, (vide Madras Government Order No. 135 R. of 24th January 1898) and to the instructions contained in the note accompanying your letter No. 8-0 of 21st April 1898, for the survey of the route on the line of metre-gauge Railway from Nanjangud to Erode, I have the honour to forward two sets of the plans and sections for the survey which has been made by the officers of this company together with 90 copies each of a rough estimate for the construction of the line and of a report upon the project.

After passing Chamarajnagar the line ascends a high ridge and here again the location will have to be reconsidered as it probably should not cross the public road.

5. It has not been possible to give an estimate in the required form of the probable traffic as there are no statistics, but from available information, a memorandum has been prepared, of which a copy is forwarded herewith. If a more detailed estimate be required, it will be necessary to send out a Traffic Officer to collect the necessary statistics.

APPENDIX II.

Extracts from the Construction Estimate of Survey of 1909-11, for the Mysore Section only

SOUTH INDIAN RAILWAY COMPANY, Ltd

NANJANGUD-ERODE RAILWAY

Metre-Gauge.

REPORT ON THE PROJECT.

I. PRELIMINARY.

1. In the year 1898 a reconnaissance survey was made for a line of Railway from Erode to Nanjangud about 121 miles in length, and a report, together with a rough estimate of the cost of construction, was submitted to Government. This report deals with the earlier history of the Project.

3. No orders were received from Government with respect to the report and estimate of the reconnaissance survey.

4. Ten years later, in their letter No. 408, dated May 8th, 1908, the Home Board informed the Agent that under existing circumstances great importance should be attached to the construction of this line, and that as soon as funds could be made available, the work should be taken in hand.

5. The Agent, therefore, at the instance of the Home Board, submitted an estimate amounting to Rs. 1,20,862 to the Railway Board for making a detailed survey of a line of Railway from Erode to Nanjangud with a Branch, taking off at Satyamangalam to Mettupalaiyam.

6. *Fieldwork.*—On receipt of the Railway Board's sanction, communicated in their letter No. 2817, R. C. of the 25th September 1908, arrangements to commence the survey were made, and survey operations were commenced in December 1908.

16. A final revision of the survey estimate, which amounts to Rs. 2,19,576. was sanctioned by the Railway Board in their letter No. 3646 R. C., dated 5th December 1910, and the whole of the fieldwork was completed in March 1911

17. The survey was supervised by Mr. G. W. Moore, Acting Deputy Chief Engineer, from the commencement up to 24th October 1910, when this officer proceeded to England on combined privilege leave and furlough. He was succeeded in the charge by Mr. McIntosh, who supervised the work until the close of the survey.

18. *Object.—(a)* The chief object of the line is to connect the trade centres of Mysore and Southern India through the Metre-Gauge lines worked by the South Indian and Madras and Southern Mahratta Railways, and to afford Metre-Gauge communication between the southernmost parts of the Indian Peninsula and the Bombay Presidency.

(b) The Mettupalaiyam Branch will reduce the journey from the north, *via* Mysore to the Nilgiris by nearly 100 miles will provide direct communication between the West Coast and Mysore, and if, as has been suggested by the Government of Madras, the Podanur-Mettupalaiyam Branch is converted to metre-gauge, a through metre

Letter No. 613 Railway, dated April 3rd, from the Joint Secretary to the Government of Madras, P. W. D. Railway Branch, to the Secretary to the Government of India, P. W. D., Simla.

gauge connection will be made with the south by way of the proposed Dindigul-Podanur Branch, *vide* Dindigul, Satyamangalam and Mettupalaiyam Railway report and estimate, survey of [illegible].

(c) Further progress of this line of railway will open a country now completely isolated as regards railways, and greatly facilitate the administration of the Coimbatore District, particularly with respect to the taluk Kollegal on the Mysore plateau.

28. *Talamalai to Nanjangud.*—The country between Talamalai and Nanjangud [illegible] is intersected with rivers [illegible] from the very edge of the plateau [illegible] inwards the interior.

29. The country [illegible] first five miles from Talamalai it rises and falls [illegible] between Talavadi and Hardanhalli it is very broken and rocky [illegible] in the vicinity of Hardanhalli [illegible] cultivated over the remaining 25 miles [illegible].

30. The soil between [illegible] is of a light stony nature, between Talavadi and Hardanhalli [illegible] over the first 30 miles to Nanjangud is [illegible] the soil is rather [illegible] stretches of black cotton [illegible].

31. Rock (gneiss) [illegible] is at no great depth below the surface anywhere; moorum or disintegrated rock generally overlies it.

32. Sandalwood and [illegible] are found in the Forest reserves over the first 18 miles; but there is little other timber of any value except for firewood.

33. There is comparatively little wet cultivation: dry crops are raised in the vicinity of Talamalai, and extensively so on the higher land [illegible] more thickly populated country between Hardanhalli and Nanjangud.

34. The rainfall averages 35 inches, but is uncertain, and the country sometimes suffers a good deal from drought.

II. Location.

60. *Talamalai to Nanjangud.*—On leaving Talamalai the line commences a long descent, following the valley of the Talamalai Nullah, which it crosses just before reaching Ambalai Station, until that stream joins the Joghatti Halla; thence it follows the tortuous valley of this river across the boundary between British and Mysore State territory at mile 86, through very broken and difficult country as far as the crossing of the Satyamangalam-Mysore road at mile 89½. Here the line, leaving the vicinity of the river, gets into open and easier country, and continuing its descent, on a long 1 in 100 grade, arrives at Hardanhalli.

61. From the road crossing at mile 89½, the alignment follows the road more or less closely all the way to Nanjangud, crossing and re-crossing it several times. Leaving Hardanhalli the line, still descending, keeps close to the road until it deflects to the right in order to find a station site for Chamarajnagar on the east side of that town. Chamarajnagar, the most important town on the Talamalai-Nanjangud Section, lies at the bottom of the long and almost continuous descent from Talamalai, the difference in level between these two places being 662 feet.

62. The line now rises again on long continuous grades for 5 miles, a three mile stretch of which is on the ruling grade, to climb the main ridge dividing the water-sheds of the Goondal river and Joghatti Halla, both tributaries of the Kabbani river, which in turn is a large tributary of the Cauvery, and traversing it, falls again for almost the whole of the remainder of the.

distance to Nanjangud. The route by this ridge is direct and, by following the top of the watershed, broken country and the crossing of much cross drainage is avoided. Near Nanjangud, the Goondal river, which joins the Kabbani at that place, is crossed on a 5-40 feet span girder bridge, and, half a mile further on, the line junctions with the Madras and Southern Mahratta, Metre-Gauge, Bangalore-Mysore Extension, at Nanjangud Town Station.

63. The original terminus of the Bangalore-Mysore line was at Nanjangud Station, but since the survey of 1898, the line has been extended about half a mile to Nanjangud Town.

V. Construction and Engineering.

34. *Girders.*—All girders are provided for up to the 1908 Metre-Gauge standard.

86. *Permanent Way.*—Flat-footed steel rails 41¼ lbs. section and 30 feet long, fastened to hardwood sleepers (12 to a rail length) with screw spikes, and having bearing plates at the joints is the type of permanent way adopted.

VI. Labour and Materials.

109. *Rates and Wages.*—The estimated rates are here appended.

Description of work	Unit	Talavadi-Nanjangud (Mysore State portion)
Earthwork—	C.ft.	Rs.
Banks under 6 feet	1,000	4— 5
" 0 to 12 "	"	5— 8
" over 12 "	"	12—15
" 0 to 40 "	"	....
" 0 to 50 "	"	....
Cutting soft soil	"	5— 6
" hard soil	"	10—12
" soft rock	"	22—25
" hard rock	"	55—60
Tunnelling	L.ft.	
Bridgework—	C.ft.	
Excavation, dry	1,000	6
" wet	"	20—25
" rock	"	50—60
Concrete in lime mortar	100	18
Masonry in abutments	"	30
piers	"	32
Bed stones	"	80–100
Slab, all sizes	"	75—80
Arching	"	85–100
Coping	"	70—75
Ballast—		
Moorum	1,000	18—19
Broken stone ballast		

X. Traffic and Statistics.

132. The line, however, will open up communication between the Coimbatore District and the rich Mysore plateau, now only provided by a road, which

APPENDIX C

of 1909-11 Survey.

ERODE-NANJANGUD RAILWAY.

Main Line.

Mysore Section.

raffic Earnings as Estimated by Palmer's Method.

Gauge, 3 ft. 3⅜ in. (*Vide* Technical Paper No. 127). **Length, 33·11 Miles.**

Name of Station	Length of country served by each section	Population of towns x 2	Population per square mile	Width of country taken	Estimated Gross earnings per annum
	Miles	No.	No.	...es	Rs.
danhalli	8·50	....	180	8	12,240
marajnaga	6·08	11,946	260	8	24,592
...aganguppi	7·38	....	255	8	15,055
Badanval	7·47	....	292	8	17,450
Nanjangud Town	4·67	5,456	300	8	16,664
Total Gross Earnings per annum	....	....	....	....	86,001

Receipts, per mile, per week $= \frac{86,001}{52 \times 33{\cdot}11} =$ Rs. 50.

Net earnings per annum = Rs. 86,001 (Gross earnings), less 55 per cent. for working expenses and hire of Rolling Stock = Rs. 38,700.

Note—Half the population of Nanjangud town is taken as affecting the line.

APPENDIX III.

Note by Mr. G. Richards M. In C. E. Engineer-in-Chief, Mysore and West Coast Railway Survey, on the traffic prospects of the projected Nanjangud-Erode Railway—metre-gauge, 119 miles.

The following orders were sent to me in letter No. 212—P. 16, dated 16th March 1916, from the Railway Board.

"In connection with recent and proposed railway developments in Mysore State, the Government of India have had under consideration the question of the construction of a line of Railway on the metre-gauge between Nanjangud, the terminus of the Bangalore-Nanjangud Railway and Erode, a Station on the South Indian Railway. The primary object of the Nanjangud-Erode Railway would be to link up the metre-gauge systems of the Mysore State and the South Indian Railway by a shorter route than at present exists *via* Dharmavaram and Katpadi, and thus to afford a more direct outlet towards the south for the trade of the State. Out of a total length of 119 miles from Nanjangud to Erode, 33 miles liein Mysore Territory, which it is estimated can be constructed for Rs. 15 lakhs, while the length of 86 miles in British Territory, which includes a heavy Ghát section, would involve an expenditure of about Rs. 95 lakhs. The return, as estimated by Palmer's formula, on the capital required for the complete, project would be low, but it has been suggested that, more particularly on the Ghát section, specially high rates might be charged, which might insure a return sufficient to justify construction. Moreover, the Railway Board think that the projects mentioned in paragraph 3 below must have a considerable effect on the earnings of the proposed through connection, and that in the circumstances the application of Palmer's formula is out of place."

"2. I am accordingly to say that the Railway Board desire that, in addition to the survey which you have been deputed to carry out for the development of the area lying between the Mysore-Arsikeri Railway and the West Coast, you should undertake a detailed enquiry into the traffic prospects of the Erode-Nanjangud Railway."

"3. I am to say that special points which require examination are the probable effects on the earnings of the proposed line, of the construction of the Mysore-Arsikere Railway, and of the Cauvery and Bhavani irrigation projects, and the possible development of Cochin Harbour."

"4. In assessing the rates which you may propose for different classes of traffic you should specially examine the possibility of charging higher rates than ordinary over the Ghát Section, where the cost of construction and working expenses will be high and, so far as present information goes, local traffic is likely to be inconsiderable."

"5. The effect of the construction of the through connection on adjoining railways should also be examined in detail."

No Traffic Officer has yet been attached to the Mysore and West Cost Railway Survey; but Mr. V. Krishnaier, Head Traffic Canvasser of the Madras and Southern Mahratta Railway, has been lent to the Survey by that Railway. Mr. V. Krishnaier has been employed for nearly three months on the detailed enquiry ordered by the Railway Board. He has done three months good hard work, and has written a very clear report which is submitted to the Railway Board with this note.*

NANJANGUD-ERODE PROJECT.

Gross Earnings.

Gross Earnings on the Nanjangud-Erode Railway are expected to be as follows

	Rs.
Local Traffic, Coaching	2,46,000
Do Goods	1,19,000
Future Traffic from Cauvery Irrigation Project	1,58,000
Do Bhavani „ „	*Nil.*
Do Mysore-Arsikere Railway	1,12,000

* Not printed.

			Rs.
Diverted Traffic, from Jalarpet and Katpadi Routes, goods Rs. 2,23,000 Passenger Rs. 36,000	...	...	2,59,000
	Total	...	8,94,000

The whole of this is new traffic with the exception of the last item; so the gross earnings of the projected Nanjangud-Erode Railway are estimated at Rs. 6,35,000 per annum *in addition to* Rs. 2,59,000 per annum gross earnings expected from traffic diverted from other Railways.

5. Nothing has been allowed in this estimate for the diversion of traffic from Marmugao and Bombay by the future development of Cochin Harbour: Rs. 20,000 or Rs. 30,000 is probably a modest estimate of earnings from such traffic (see paragraphs 24 and 25).

6. And nothing has been allowed for the increase in through traffic between the north and south of India which may be expected to follow the building of a chord line like the Nanjangud-Erode Railway.

7. Other possible sources of profit which have been ignored are the Mysore-Coorg Railway and the Nanjangud-Manantoddy Railway if these are built but not extended to the West Coast.

Rates.

8. The rates assumed in this estimate are as follows:—

Passengers	...	...	$2\frac{1}{2}$ pies per passengar per mile
Goods, local and future	...	...	9 pies per ton per mile plus two terminals of 6½ annas per ton each.
Goods, diverted	...	...	Present rates per maund per mile on Madras and Southern Mahratta Railway.

but it is assumed that 21 miles of Ghàt line between Talamalai and Kottamangalam stations are charged for as 42 miles.

Effect on Adjoining Railways.

9. There are three railway systems which would be affected by the construction of the Nanjangud-Erode Railway.

(i) the Madras and Southern Mahratta Railway;

(ii) the Mysore State Railways (including lines now worked for the Mysore State by the Madras and Southern Mahratta Railway);

(iii) the South Indian Railway.

10. It is assumed that the 33 miles of the Nanjangud-Erode Railway which lie in Mysore State will be built and worked by the Durbar as an integral part of the Mysore State Railways; and that the remaining 86 miles (reckoned as 86+21=107 miles) will be built and worked as an integral part of the South Indian Railway.

11. *Madras and Southern Mahratta Railway.*—On goods traffic diverted from the Jalarpet and Katpadi routes, the Madras and Southern Mahratta Railway is expected to earn only Rs. 41,000 (gross) instead of Rs. 2,17,000 (gross) which it earns at present from that traffic. So the loss of gross goods earnings on the Madras and Southern Mahratta Railway is expected to be Rs. 1,75,000. If we assumed that working expenses would amount to 60 per cent. of this sum (as on the Madras and Southern Mahratta metre-gauge railways in 1914-15, see page 313 of Administration Report), the net loss on the Madras and Southern Mahratta Railway would be estimated at Rs. 70,000 per annum. But it is not fair to assume that the Madras and Southern Mahratta Railway can save as much as 60 per cent. of gross earnings in working expenses of traffic taken off lines that are not working up to their full capacity: the percentage is probably nearer 30 than 60. Assuming that the Madras and Southern Mahratta Railway can reduce their working by only 30 per cent. of Rs. 1,75,000, the net loss on that Railway is estimated at Rs. 1,22,000 per annum from the diversion of goods traffic. This is equivalent to 55 per cent. of the Rs. 2,23,000 which the Nanjangud-Erode line is expected to earn from diverted goods traffic: if we assume that the same relation holds good for diverted passenger traffic, the Madras and Southern Mahratta Railway will lose a further Rs. 20,000 (=55 per cent. of Rs. 36,000, see paragraph 2).

12. The total net loss to the Madras and Southern Mahratta Railway is therefore, estimated at Rs. 1,42,000 per annum.

13. *Mysore State Railways.*—This is the only railway system which is expected to profit by the construction of the Nanjangud-Erode Railway. 33 miles of the projected line lie in Mysore, so the Durbar's share of the gross earnings of the Nanjangud-Erode Railway may be estimated at $\frac{33}{140}$ths of the amounts given in paragraphs 3 and 4 that is Rs. 1,50,000 from new traffic and Rs. 61,000 from diverted traffic, total Rs. 2,11,000. On the Mysore-Arsikere and Mysore-Nanjangud Railways, the Mysore State Railways are expected to gain Rs. 1,09,000 (gross) from diverted goods traffic and about Rs. 18,000 ($=\frac{109}{223}$ of Rs. 36,000) from diverted passenger traffic, total Rs. 1,27,000. The remaining lines of the Mysore State Railway system are expected to *lose* Rs. 1,05,000 (gross) on diverted goods traffic and about Rs 17,000 ($=\frac{105}{223}$ of Rs 36,000) on diverted passenger traffic, total Rs. 1,22,000.

So by the construction of only 33 miles of new railway through ordinary Mysore Plateau country, the Mysore Durbar stand to increase their gross railway earnings by Rs. 1,50,000 from new traffic and Rs. 66,000 from diverted traffic, total Rs. 2,16,000.

They should be able to work the new traffic for 60 per cent. of gross earnings and the diverted traffic for 30 per cent. of gross earnings : [this would bring the total working expense on the 33 miles of new railway to 50 per cent. of its gross earnings or Rs. 61½ per mile per week].

14. So the Mysore Durbar stand to gain Rs. 1,06,000 in net earnings (Rs. 60,000—Rs. 46,000).

Even if the 33 miles of new railway cost as much per mile as the Mysore-Arsikere Railway [Rs. 74,462 per mile, total Rs. 24½ lakhs] the interest earned is likely to be nearer 4½ than 4 per cent per annum. The estimate of 1912 (prepared by the South Indian Railway) amounts to only Rs. 43,852 per mile without rolling-stock. At Rs. 50,000 per mile [total capital cost Rs. 16½ lakhs,] the interest earned would be nearly 6½ per cent. per annnm.

15. *South Indian Railway.*—The construction (as an integral part of the South Indian Railway) of the 86 miles of the Nanjangud-Erode Railway which lie in British Territory offers no apparent advantage to the South Indian Railway Company. It is probable that the South Indian Railway Company will lose little or nothing by the diversions of traffic from the Jalarpet and Katpadi routes to the Nanjangud-Erode route: but this will leave only Rs. 4,85,000 [$=\frac{107}{140}$ths of Rs. 6,35,000, see paragraph 4] as the gross earnings of 86 miles of the Nanjangud-Erode Railway, excluding earnings on diverted traffic.

16. The percentage of working expenses to gross earnings on the metre-gauge lines of the South Indian Railway has varied during recent years from 50·56 in 1912 to 57·74 in 1914-15. Papers sent to the Railway Board with letter No. A. C. S.—2838-3-1-94, dated 25th August 1913, from the Agent of the South Indian Railway give the following estimates of working expenses of the Nanjangud-Erode Railway—

> 55 per cent. of gross earnings" (=Rs. 27½ to Rs. 28½ per mile per week, including hire of rolling-stock) by the Chief Engineer

At least Rs. 50 a mile a week" by the Board of Directors. And in the papers which were sent with Agent's letter A. C. S.-2838-3-1-111, dated 8th March 1915, to the Railway Board, the "Working Expenses and hire of Rolling Stock" are again estimated at 55 per cent. of gross earnings.

17. Now 55 per cent. of Rs. 4,85,000=Rs. 2,67,000.

Rs. 60 per mile per week on 86 miles.

So, on this basis for working expenses, the net earnings of the South Indian Railway are estimated to be increased by Rs. 2,18,000 [= Rs. 4,85,000—Rs. 2,67,000] if the Nanjangud-Erode Railway is built. Rs. 2,18,000 will

pay a dividend of only 2·29 per cent. on Rs. 95·17 lakhs, which is the amount at which the capital cost of the British Section of the Nanjangud-Erode Railway has been estimated by the South Indian Railway. I fear that the dividend from gross earnings, Rs. 4,85,000, will be less than 2·29 per cent. for I think that the estimates of capital cost (Rs. 95·17 lakhs) and working expenses [Rs. 60 per week on 86 miles, of which 21 or 22 miles are on a Ghât where a pusher engine will be required] are both too low.

18. I presume that the South Indian Railway Company will be asked to check their estimates of capital cost and working expenses if it is proposed that the Nanjangud-Erode Railway shall be constructed at an early date.

Number of Trains required.

19. From figures contained in Mr. Krishnaier's report I find that the number of daily trains each way should be *at least* two.

Goods Traffic diverted from Jalarpet	=	7,63,983 maunds.	
,, ,, ,, Katpadi	=	3,37,301 ,,	
,, ,, total—1,101,284 maunds	=	41,000	tons.
,, through from Mysore-Arsikere Railway ...	=	17,000	,,
,, ,, Cauvery Irrigation	=	24,000	,,
,, local amounts to as much as 51,050 tons, but the maximum amount on any section where grades are not easy is only about ...	=	10,000	,,
Total Goods, per annum	=	92,000	,,
,, per diem	=	252	,,
,, in each direction	=	126	,,
Passengers diverted from Jalarpet, per annum		20,000	
,, ,, per diem in each direction		28	
,, local, total 1,240 in each direction; but they are expected to travel only 21 miles on an average: so the number carried over any particular mile should be only about		200	
Total number of passengers in each direction per diem, say		228	

20. In 1913-14, the average number of passengers carried in a passenger train on the South Indian Railway was 306 and the average weight of goods carried in a goods train was 83·66 tons. For the Madras and Southern Mahratta Railway the corresponding figures were 220 passengers and 88·32 tons.

21. So on the Nanjangud Erode Railway we shall probably want about 1½ daily trains each way for 126 tons of goods and very nearly a full train for 228 passengers. I am of course, assuming that a pusher enigne will be used for every train up the Ghât between Kottamangalam and Talamalai.

ALTERNATIVE PROJECT.

Nanjangud-Mettupalaiyam.

22. There is an alternative line from the foot of the Ghât (Kottamangalam) which would join the South Indian Railway at Mettupalaiyam instead of at Erode. The alternative is not mentioned in the instructions quoted in paragraph 1 of this note, but it has been strongly recommended by the Government of Mysore. It would be about 26 miles shorter than the Nanjangud-Erode line and its cost was estimated by the South Indian Railway Company to be Rs. 9½ lakhs less.

23. The gross earnings of this alternative line have, therefore, been investigated by Mr. V. Krishnaier, whose report shows that it is likely to earn much less than the Nanjangud-Erode Railway both from new traffic and from diverted traffic.

Gross Earnings.

24. The estimated earnings compare as follows

	Nanjangud Erode Railway	Nanjangud Mettupalaiam Railway
	Rs.	Rs.
Local Traffic Coaching	2,46,000	1,22,000
Do, Goods	1,19,000	61,000
Future Traffic from Cauvery Irrigation Project	1,58,000	1,28,000
Future Traffic, from Mysore-Arsikere Railway	1,12,000	91,000
Total new traffic	6,35,000	4,02,000
Diverted Traffic, from Jalarpet and Katpadi, Goods	2,23,000	1,96,000
Passengers	36,000	4,000
Total	2,59,000	2,00,000
Traffic to be diverted *if* Cochin Harbour is developed	20,000	28,000
Total diverted traffic	2,79,000	2,28,000

25. The traffic which *may* be diverted *if* Cochin harbour is developed, has been omitted from my calculations about the Nanjangud-Erode project, so I will omit it from those for the Nanjangud-Mettupalaiyam line.

Probable dividend.

26. Assuming the South Indian Railway Company's estimates of capital cost and working expenses to be correct, we should get the following results:—

	Nanjangud-Erode Railway	Nanjangud-Mettupalaiyam Railway
	Rs.	Rs.
Gross earnings, total	8,94,000	6,02,000
Working expenses, 55 per cent ...	4,92,000	3,31,000
Net earnings	4,02,000	2,71,000
Capital cost	1,09,69,000	1,00,24,000
Dividend from total (new and diverted) traffic	3·66 per cent	2·70 per cent.
Deficit from 4 per cent dividend ...	37,000	1,30,000
Gross earnings from new traffic ...	6,35,000	4,02,000
Working expenses, 55 per cent ...	3,49,000	2,21,000
Net earnings	2,86,000	1,81,000
Dividend from new traffic only ...	2·61 per cent	1·81 per cent
Deficit from 4 per cent dividend ...	1,53,000	2,20,000

27. When we assume that working expenses will be 55 per cent. of gross earnings, both from new and from diverted traffic, we are really assuming the following figures for working expenses per mile of railway per week:—

	Nanjangud-Erode Railway—119 miles	Nanjangud-Mettupalaiyam Railway—93 miles
	Rs.	Rs.
On total traffic (new and diverted)	80	68
On new traffic only ...	56	46

How near to the truth these figures are likely to be, can best be judged by officers of the South Indian Railway Company. I suggest that the Agent of that Company be asked to compile estimates of the working expenses of the Nanjangud-Erode and Nanjangud-Mettupalaiyam Railways for the amount of traffic assumed in this note. [See paragraphs 19—21 for the amount of traffic anticipated on the Nanjangud-Erode line. On the alternative Nanjangud-Mettupalaiyam line the 'Total Goods per diem in each direction' is estimated at about 129 tons and the 'Total number of passengers in each direction per diem' at about 133, against 126 tons and 228 passengers on the Nanjangud-Erode line.]

APPENDIX IV.

Extract from letter No. 1858, dated 18th December 1916, from Mr. K. Krishnaiengar, Secretary to the Government of Mysore for Railways, to the First Assistant to the Hon'ble the Resident in Mysore.

I am directed to invite reference to the Residency Endorsement No. 2088, dated 24th March 1916, forwarding copy of Railway Board's letter No. 212 P.—16, dated 16th idem to the Engineer-in-Chief, Mysore and West Coast Railway Surveys, and to observe as follows

(i) In a note dated the 15th September 1916, submitted to the Railway Board (copy forwarded to this office with his letter No. 642, dated 16th idem), Mr. Richards has discussed the traffic prospects of the Nanjangud-Erode line from all standpoints.

(ii) His investigation shows that the project will be profitable to the State. Even omitting from calculation all traffic from Marmugao and Bombay, by the future development of the Cochin Harbour and all increase in through traffic between the North and South of India which such a chord line is sure to attract, the percentage of return on outlay works out to 3·66. Including the anticipated increase of traffic, the same would mount up to 4 per cent or more.

(iii) Mr. Richards himself is of opinion that the return to the Mysore State can be taken at 4 to 6 per cent and on the whole line at 3·66 per cent against 2·6 per cent previously estimated by the officers of the South Indian Railway in their project report of 1911. The present investigations decidedly show that more remunerative results can be expected. The Durbar would therefore venture to express the hope that the Government of India will now accord their sanction to the early construction of this much needed but long deferred link in the Railway system in Southern India.

3. It is perhaps unnecessary to add that the Durbar attach great importance to the speedy construction of this line as it will, besides connecting the Madras and Southern Mahratta and South Indian metre-gauge systems, open out the large district of Mysore with its rich and valuable agricultural and forest products. As at present advised, the Durbar will be ready to start construction on their section as soon as construction can be started on the British side.

5. If there still be difficulties about starting construction on the line, the Durbar would submit for the consideration of the Government of India the following arrangement for financing, construction and working of the Railway:—

(*a*) The Durbar to finance the line up to Satyamangalam.

(*b*) The District Board of Coimbatore who, the Durbar understand, are keen on the construction of this line, to finance the line up to that place from Erode.

(*c*) The entire line to be allowed to be constructed and worked by the Durbar, the District Board being a partner in the concern, and the usual supervision of the Government of India being exercised over this line as on company worked lines.

APPENDIX V.

Note, dated 23rd May 1917, by Mr. G. Rossi Ward, Engineer-in-Chief, Mysore and West Coast Railway Surveys and Chief Engineer with the Railway Board on the Working Expenses, Capital Cost and Probable Dividends of the Nanjangud-Erode and Nanjangud-Mettupalaiyam Railway Projects.

1. In paragraph 26 of my note of the 15th September 1916 I made the following comparison between the Nanjangud-Erode and Nanjangud-Mettupalaiyam projects *on the assumption that the South Indian Railway Company's estimate of capital cost and working expenses were correct.*

	Nanjangud-Erode Railway.	Nanjangud-Mettupalaiyam Railway.
	Rs.	Rs.
Gross earnings, total	8,94,000	6,02,000
Working expenses, 55%	4,92,000	3,31,000
Net earnings	4,02,000	2,71,000
Capital cost	1,09,69,000	1,00,24,000
Dividend from total (new and diverted) traffic	3·66%	2·70%
Deficit from 4% dividend	37,000	1,30,000
Gross earnings from new traffic	6,35,000	4,02,000
Working expenses, 55%	3,49,000	2,21,000
Net earnings	2,86,000	1,81,000
Dividend from new traffic only	2·61%	1·81%
Deficit from 4% dividend....	1,53,000	2,20,000

2. In paragraph 17 of the same note I expressed the opinion that the South Indian Railway Co.'s estimates of capital cost and working expenses were both too low: in spite of that, the "Mysore Durbar's Railway Secretary has written" that I have estimated the dividend of the Nanjangud-Erode project at 3·66 per cent: it is desirable that any impression of this sort shall be removed.

Working Expenses.

3. New estimates recently prepared by the Agent of the South Indian Railway Company show that he no longer expects to be able to work either the Nanjangud-Erode Railway or the Nanjangud Mettupalaiyam Railway for 55 per cent of the Gross Earnings.

4. The new estimates, *excluding* hire of rolling stock, are as follows:—

Nanjangud-Erode, New and Diverted traffic	61·63%
Nanjangud-Mettupalaiyam, " "	68·84%
Nanjangud-Erode, new traffic only	71·31%
Nanjangud-Mettupalaiyam, new traffic only	84·16%
Or in rupees per mile per week—	
Nanjangud-Erode, new and diverted traffic	Rs. 89
Nanjangud-Mettupalaiyam, new and diverted traffic	Rs. 85½
Nanjangud-Erode, new traffic only	Rs. 73
Nanjangud-Mettupalaiyam, new traffic only	Rs. 70

Capital Cost.

5. The new estimate of working expenses does not cover the cost of hiring Rolling Stock: so we must add to the South Indian Railway Company's construction estimate of 1912 some lakhs of rupees for equipping the projected lines with their own Rolling Stock,—say Rs. 12,000 per mile on the Plains and Plateau Sections and Rs. 15,000 per mile on the Ghât Section.

6. The Nanjangud-Erode and Nanjangud-Mettupalaiyam projects may be divided into three sections:—

	Miles.	
Plateau Section	48	Nanjangud to Talamalai.
Ghât Section	22½	Talamalai to Kottamangalam.
Plains Sections	48½	Kottamangalam to Erode or
	22½	Kottamangalam to Mettupalaiyam.

7. The cost of the Plateau Section, without Rolling Stock, was estimated by the S. I. Railway Coy. 1912 at Rs. 43,852 per mile in Mysore State and at Rs. 45,442 in British Territory. Including Rolling Stock, (at pre-war prices) and allowing for 50 lb. rails (also at pre-war prices) I think that the Plateau Section will cost about Rs. 70,000 per mile. Reasons for this may be found in Appendix IV of my report on the Hassan-Mangalore project, dated 15th March 1917.

8. The cost of the Ghat Section, without Rolling Stock, was estimated by the South Indian Railway Company in 1912 at Rs. 2,90,091 per mile. On the Ghat, as well as on the Plateau and Plains Sections the South Indian Railway Company allowed for rails weighing only 41¼ lbs. per yard. I think that we ought to estimate for 60 lb. rails on the Ghat and 50 lb. rails elsewhere. Even at pre-war rates, provision for Rolling Stock and heavier rails would raise the South Indian Railway Company's estimate to a good deal over Rs. 3 lakhs per mile. On the other hand we can reduce the estimate by allowing 17° curves on the Ghat, for the South Indian Railway Company's projected line has no curve sharper than 10½°. For the purpose of this note I will assume that the Ghat Section can be built under pre-war conditions for Rs. 3 lakhs per mile the same rate as I have allowed for the Ghat Section of the Hassan-Mangalore Railway.

9. The cost of the plains Sections, without Rolling Stock, was estimated by the South Indian Railway Company in 1912 at Rs. 47,456 per mile for the Kottamangalam-Erode Railway and Rs. 60,115 for the Kottamangalam-Mettupalayiam Railway. These rates include about Rs. 18,300 per mile for 41¼ lb. Permanent way. If we add Rs. 12,000 per mile for Rolling Stock and allow about Rs. 22,200 (-18,300 × 50 ÷ 41¼) per mile instead of Rs. 18,300 for Permanent way, we shall raise the South Indian Railway Company's estimates to about Rs. 63,000 per mile for the Kottamangalam-Erode Railway and Rs. 76,000 per mile for the Kottamangalam-Mettupalaiyam Railway.

10. So we get the following figures for capital cost under pre-war conditions:—

Nanjangud-Erode Railway

		Rs. in lakhs.
Plateau Section	48 miles at Rs. 70,000	33·60
Ghat Section	22½ miles at Rs. 3,00,000	67·50
Plains Section	48½ miles at Rs. 63,000	30·56
Total	119 miles	131·66

Nanjangud-Mettupalaiyam Railway.

Plateau Section	48 miles at Rs. 70,000	33·60
Ghat Section	22½ miles at Rs. 3,00,000	67·50
Plains Section	22½ miles at Rs. 76,000	17·10
Total	93 miles	118·20

Probable Dividends.

11. The statement quoted in paragraph one of this note may therefore be modified as follows for pre-war conditions:—

	Nanjangud-Erode Railway 119 Miles Rs.	Nanjangud-Mettupalaiyam Railway 93 Miles Rs.
Gross Earnings, maximum possible from both new and diverted traffic	8,94,000	6,02,000
Working Earnings	5,50,962	4,14,442
Net Earnings	3,43,038	1,87,558
Capital Cost	131·66 lakhs.	118·20 lakhs.
Dividend from maximum (new & diverted) traffic	2·61%	1·59%
Deficit from 4% dividend per annum	1,84,000	2,85,000

Deficit from 5% dividend per annum	3,15,000	4,03,000
Gross Earnings from new traffic only, assuming that no traffic will be diverted	6,35,000	4,02,000
Working Expenses	4,52,832	3,38,330
Net Earnings	1,82,168	63,670
Capital Cost	131·66 lakhs.	118·20 lakhs.
Dividend from new traffic only	1·38%	0·54%
Deficit from 4% dividend per annum	3,44,000	4,09,000
Deficit from 5% dividend per annum	4,76,000	5,27,000

G. RICHARDS, M. INST. C.E.,
Engineer-in-Chief,
Mysore and West Coast Ry. Survey.

Simla,
23rd May 1917.

4.—*Copy of letter No. 347, dated 15th October 1918, from the Amildar. Chamarajnagar, to the Superintending Engineer, Mysore Railway Surveys, Bangalore.*

With reference to your D.O. letter No. 127 of the 3rd instant and in continuation of this office letter dated the 6th idem I herein enclose a statement of exports and imports to the shandy at Santhemarahalli. In striking the average for 26 *santhes* the imports come to 1,13,692 rupees and the value of goods exported come to Rs. 50,271. I hope this information is sufficient for you. If you want any further details I am ready to supply them.

I beg to be excused for the delay as myself and the Monegar at Santhemarahalli were laid up with Influenza so long.

The Monegar sent the accounts only now.

Statement showing Exports and Imports at Santemarahalli Shandy

Description	Exports Amount Rs.	Imports Amount Rs
Paddy	1,817	1,817
Jola	980	2,240
Ragi	420	1,140
Rice	1,876	1,876
Boiled Rice	2,870	2,870
Dhall	130	186
Thogari	200	200
Horse gram	143	143
Beans	350	1,030
Black gram	192	192
Green gram	375	375
Castor seeds	225	225
Coriander seeds	425	748
Bengal gram	299	299
Pulses	588	588
Salt	520	600
Chillies	1,225	750
Kerosene oil	756	756
Gingelly	50	56
Wheat	117	127
Jaggery	900	1,500
Clothes	7,200	25,600
Gold and silver	2,000	2,000
Onions	40	440
Murmur	575	575
Tobacco	800	4,000
Nuts	5,450	18,550
Sugar, etc.	3,000	5,450
Iron and other articles	3,049	1,07,772
Cattle, etc	5,145	25,300
Total	42,117	2,07,305

5.—*Copy of letter No. 1581, dated 20th October 1918, from the Superintending Engineer, Mysore Railway Surveys, Bangalore, to the Amildar, Chamarajnagar Taluq.*

With reference to the statement sent with your No. 347, dated 15th October 1918, will you please let me know what period the statement covers. In your letter you say the average of 26 santhes showed that the value of Imports was Rs. 1,13,692 and of Exports Rs. 50,271, from which I have to conclude that the statement relates to only one Santhe at which the imports were double the average of the 26 Santhes you refer to.

If the average transactions of 26 weeks amount to Rs. [illegible] lakhs, the total for the half year must have been Rs. 30 lakhs in Imports and Rs. 13 lakhs in Exports or say Rs. 60 lakhs a year on both accounts. Is this so?

Another point I do not understand is the value of the exports and import trade in paddy, rice, boiled rice, dholl, jaggery, gram, [illegible] groundnut, castor seeds, Bengal gram, ghee, salt, kerosine, ginjelly, [illegible] and silver, onions and murmur are absolutely identical. What does this mean?

Does the statement show the exports out of, and imports into, Mysore territory *via* Santhemarahalli, or does it show the exports from and imports into Santhemarahalli only? If the latter where do the commodities come from and where do they go to? If the former what becomes of the imports? Especially of "iron and other articles" which account for over a lakh of rupees during the week for which details are given.

I shall be glad to have an accurate statement with a clear explanation at your earliest convenience.

6.—*Copy of letter No. 129—E. 3, dated 5th November 1918 from the Amildar, Chamarajnagar, to the Superintending Engineer for Surveys, Bangalore.*

I am in receipt of your letter No. 1581, dated the 31st October 1918. The statement sent by me shows only the average imports and exports of the santhe at Marhalli calculated on 26 santhes 15-4-17 to 14-10-17. The figures given in the statement relate to only one santhe on one day.

It is true that as per these figures the total transactions for the half year come to Rs. 30 lakhs in imports and 13 lakhs in exports or say Rs. 60 lakhs a year on both.

As regards the doubt entertained as to the identity in the value of the imports and exports in paddy, rice, boiled rice, dholl, [illegible] I have to state that these things when they remain unsold are taken away deposited in the santhe. The quantity brought is shown as imports; and as the quantity remaining unsold at the end of the day is taken away by the owner, it is shown as exports together with what he has sold. Hence the figures relating to these imports and exports appear identical.

The statement shows only the imports to and exports from the santhe at Marhalli. The commodities come from the surrounding villages, and also Yelandur, T.-Narsipur, Nanjangud, Kollegal and Satyamangala Taluks.

I have herewith sent three books in original showing the statistics collected at the santhe. They may kindly be returned when done with.

7.—*Memo No. R. S. 1754, dated 17th December 1918, from the Secretary to the Government of Mysore for Railways, to the Agent, Mysore Railways.*

With reference to Memo No. A. E. 12252, dated the 15th November 1918, forwarding a copy of the notes of the Superintending Engineer for Surveys about taking Nanjangud-Chamarajnagar *via* Santhemarahalli, the Agency Branch is informed that Government direct that as the taking of the line *via* Santhemarahalli will add fully eight miles to the length without anything to compensate for it by way of increased traffic, it may be given up and that if traffic conditions should warrant it later, the idea of having a narrow gauge feeder line connecting Chamarajnagar with Santhemarahalli, Yelandur, Kollegal and perhaps Sivasamudram may be considered.

Government, therefore, observe, that just at present efforts should be concentrated on obtaining the shortest route possible between Nanjangud, the present rail head and Talamalai which has been selected as the ghaut head station by the South Indian Railway. Estimates may be got ready and submitted to Government early.

4 3/14

PROCEEDINGS OF THE GOVERNMENT OF
HIS HIGHNESS THE MAHARAJA OF MYSORE.

LB 129-22 -2

Read

Correspondence ending with letter -
No. D_2 Dis.111/L.B.22-23 dated the 22nd D
cember 1922 from the President, District
Board, Mysore, to the Secretary to Gover
ment for Railways stating that the Board
are willing to raise a debenture loan for the completion of the Nanjangud-Chamarajanagar Railway ~~Construction of the~~ supplementing it if necessary by a loan fron
the Mysore Bank and utilize the accumulat
ed amount of the Railway Cess levied in
the District with the annual income there
from for paying interest due on the loan
and for providing for the sinking fund requir
ed for the liquidation of the loan.

ORDER No. L 6971-24

Bangalore, 9th April March 1923.

In Government Order No. R.929-31/L.B
123-17-11 dated the 16th July 1919, the
construction of the Nanjangud-Chamarajana
gar-Hardanhalli Section of the Nanjangud-
Erode Railway was directed to be undertak
en by Government.

2. The construction of the Section
was commenced on 1st November 1919 under
sanction conveyed in Government Order
No. R.S.783-92/Ry.F.16-G.19-20 dated the
28th October 1919.

3. Subsequently, Government in their

of their resources including the Railwa
Cess

6 ~~As~~ The District Board have sinc
intimated that they are willing to rais
a debenture loan as suggested ~~and to~~
~~carry out all instructions conveyed in~~
~~para 5 supra~~, Government ~~consider that~~
~~it is expedient to encourage the con-~~
~~struction of feeder lines by the Distri~~
~~Boards and hereby~~ are therefore pleased to authorize the Distric
Board of Mysore to raise a debenture -
loan for the work, ~~and~~ The Dt Bd is requested to submit a definite
scheme showing the terms and conditions
of the loan and the arrangements for meetin
the interest and Sinking fund charges.

Supplementing it if necessary by a loan from the Mysore Bank and utilize the accumulated amount of the Railway Cess levied in the Dt. with the annual income therefrom for paying the interest due on the loan and for providing for the Sinking fund required for its liquidation

31/3/13

29.3.13. SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT.

To

The Presdt., Dt. Board, Mysore.
The Finl. Secy. to Govt.
The Comptr., to Govt.
The Secy. to Govt., for Railways.

E.W.M.

MRM S 22 3,500-31 7 22

37202 URGENT

RAILWAY SECRETARIAT.

No. R-S.2414

Mysore, 14th April 1923.

LB 129-22-3

From

C. DOVE WILSON, Esq.,

Secretary to the Government of Mysore for Railways,

MYSORE.

16 APR 1923 LOCAL SELF GOVT. BRANCH

To APR 1923 To

The Secretary to the Government of Mysore,
Revenue Department, Bangalore.

Sir,

Construction of the Nanjangud-Chamarajanagar-Hardanhalli Section of the Nanjangud-Erode Railway.

I have the honour to request you will be so good as to arrange to send this office file of papers leading to the issue of Government Order No.L.6971-4/M.129-22-2 dated 9th April 1923 on the above subject as the same is required for reference.

I have the honour to be,
Sir,
Your most obedient servant,

For Secretary for Railways,
Government of Mysore.

ALM.

14.4.23

G. R. S. VI—G

SUBJECT.

Diary No. of letter replied to 5334.

Section LB
File No. 129-22
Serial No. 4

General and Revenue Secretariat

No. L 7261 Land Revenue files

the *191*

Date of issue 30/4/23

Signed by for CAR

To

The Secretary to Govt
Mysore Railways

Sir

I am directed to ~~acknowledge~~ your RS. No 2414 dated 14.4.23 & return herewith in the manner duly noted
file of papers of your office leading
to the Govt order No L 6971 FR 129-22-2
dated 9.4.23 as desired by you

I have &c

CAR
26.4.23
for Rev Secretary to Govt

29/4 over.

By Lett
1) File 16 & 7 20-21
2) Do
3) Do 07 22-1.

Lee 41
(Continuation of Lee 11 & 1916)

Verified